



Catch and Tame the Cat!

# Practices for GMAT

## Book 1



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# Practices for GMAT Book 1

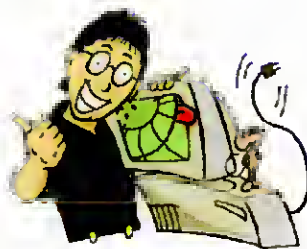
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# Practices for GMAT

## Book 1

# Test 1



## Practices for GMAT Book 1

### SECTION I

Time—30 minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to blacken space

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

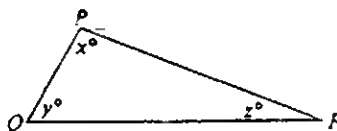
You may assume that the position of points, angles, regions, etc., exist in the order shown.

All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

- (1)  $PQ = PR$
- (2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

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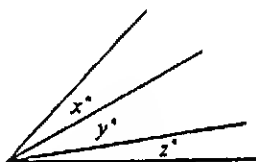
- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
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- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

1. If a certain camera and camera-case were purchased separately, what was the cost of the camera?

- (1) The total cost of the camera and the camera case was \$72.
- (2) The camera cost 3 times as much as the case.

2. At a fair, tickets for rides cost 50 cents each. If Tim spent all the money he had with him for these tickets, how many ride tickets did he buy?

- (1) If the cost of the tickets had been 60 cents, he could have bought exactly 10 tickets, with no money left over.
- (2) If he had had 50 cents more with him, he could have bought exactly 13 tickets, with no money left over.



3. In the figure above, is  $x$  equal to  $y$ ?

- (1)  $x + y = 40$
- (2)  $x = z$

4. What is the value of  $x$ ?

- (1)  $3x - 2(x - 1) = 5x - 8$
- (2)  $3x > 2(x + 1)$

5. In a certain school, out of a total of 65 students, 80 percent are currently enrolled in either a history course or a literature course, or both. How many of the students are currently enrolled in a history course?

- (1) Ten of the students are currently enrolled in both a history course and a literature course.
- (2) Thirty-three of the students are currently enrolled in a literature course.

6. What is the ratio of  $x$  to  $y$ ?

- (1) The ratio of  $x$  to  $2y$  is 1:6.
- (2)  $y = 9$

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D EACH statement ALONE is sufficient.  
E Statements (1) and (2) TOGETHER are NOT sufficient.
7. At the end of year  $X$ , was the number of self-employed men more than twice the number of self-employed women?
- (1) From the end of year  $X$  to the end of year  $Y$ , the number of self-employed men increased by 47 thousand, which was an increase of 1 percent, and the number of self-employed women increased by 213 thousand, which was an increase of 10 percent.
- (2) At the end of year  $X$ , there were 2.57 million more self-employed men than self-employed women.
8. What is the perimeter of square region  $S$ ?
- (1) The area of region  $S$  is 25.
- (2) The area of a square region having a perimeter twice that of  $S$  is 100.
9. What was the number of defective batteries in a shipment of 4,000 batteries?
- (1) In a particular sample of 10 batteries selected from the shipment, 1 was defective.
- (2) In a particular sample of 100 batteries selected from the shipment, 3 were defective.
10. Is  $x$  equal to 0?
- (1)  $x + 1 > 0$
- (2)  $x' = -x$
11. When a rectangular label, 21.5 centimeters long, is wrapped around the curved surface of a solid circular cylinder with its shorter ends overlapping, it exactly covers the curved surface. What is the volume of the cylinder in cubic centimeters, if the thickness of the label is ignored?
- (1) The label overlap is 0.5 centimeter.
- (2) The width of the label is 7.5 centimeters.

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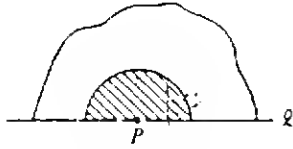
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E Statements (1) and (2) TOGETHER are NOT sufficient.
12. What is Jim's annual salary and June's annual salary?
- (1) The combined total of the annual salaries of Jim and June is \$50,000.  
(2) If Jim were to receive a 10 percent increase in annual salary and June a 12 percent increase, their combined annual salaries would be \$55,600.
13. If  $x$ ,  $y$ , and  $z$  are integers, is  $x(y^2 + z^3)$  even?
- (1)  $x$  is odd.  
(2) The product  $xyz$  is odd.
14. Is  $x(y + z) > 0$ ?
- (1)  $xyz > 0$   
(2)  $yz > 0$
15. Joaquin's insurance premium is divided into three payments. If the first payment is 40 percent of the premium and the other two are equal payments, what is the dollar amount of the third payment?
- (1) The first payment is \$320.  
(2) The sum of the first and second payments is \$560.
16. What is the value of  $xy$ ?
- (1)  $(x + y)^2 = 37$   
(2)  $(x - y)^2 = 17$
17. What is the value of  $x$  percent of  $y$ ?
- (1)  $y$  percent of  $x$  is 20.  
(2)  $y = 50$

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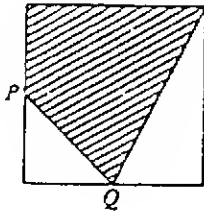
18. The shaded portion of the figure above represents a tunnel's semicircular entrance with center  $P$ . How many feet high is the entrance at a point on the horizontal line  $\ell$  that is 10 feet from  $P$ ?
- (1) The diameter of the entrance is 60 feet.
  - (2) The entrance is 24 feet high at a point on  $\ell$  that is 18 feet from  $P$ .
19. Is  $x > y$ ?
- (1)  $10 + x = 20 + y$
  - (2)  $x^2 > y^2$
20. At the post office Louis bought 50 stamps, each of which was either a 20-cent or a 25-cent stamp. How many of the stamps were 25-cent stamps?
- (1) He spent a total of \$11.00 for the stamps.
  - (2) He bought  $1\frac{1}{2}$  times as many 20-cent stamps as 25-cent stamps.
21. If  $n$  is a positive integer, is  $n$  equal to 100?
- (1)  $\sqrt{n} > 9$
  - (2)  $\sqrt{n} < 11$
22. On a certain test, the sum of Bob's grade and Amy's grade was 180 and the sum of Bob's grade and Joe's grade was 150. What was Bob's grade?
- (1) The average (arithmetic mean) of the grades of Bob, Amy, and Joe was 82.
  - (2) The sum of Amy's grade and Joe's grade was 162.

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23. What fraction of the square region in the figure above is shaded?
- (1) The area of the square region is 36.
  - (2)  $P$  and  $Q$  are midpoints of two sides of the square as shown.
24. Three dice, each with faces numbered from 1 through 6, were tossed onto a game board. If one of the dice turned up 4, what was the sum of the numbers that turned up on all three dice?
- (1) The sum of two of the numbers that turned up was 10.
  - (2) The sum of two of the numbers that turned up was 11.
25. If  $n$  is an odd integer greater than 1, is  $n$  prime?
- (1)  $n$  is a factor of 56.
  - (2) 14 is a factor of  $2n$ .

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 2

Time—30 minutes

25 Questions

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and blacken the corresponding space on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

If early twentieth-century geologists and geophysicists had heeded the fundamental axiom of the Greek philosopher Heraclitus, "everything flows," the sterile and sometimes bitter controversy that

- (5) divided them in the first half of the twentieth century might have been avoided.

At the time, some geologists argued that the history of past climates, reconstructed from examination of rock strata, and the distribution of past

- (10) fauna, documented through analysis of the fossil record, were inexplicable if the continents had never moved. Noting that some of the continents could be fitted together reasonably well as a kind of crustal jigsaw puzzle, they theorized that during
- (15) some part of the Earth's history, the continents must have moved.

Geophysicists, looking at different types of data, reached a very different conclusion. When a major earthquake occurred, they noted, the Earth be-

- (20) haved like a gigantic bell struck by a hammer: it rang, and the reverberations echoed around the Earth for several hours thereafter. They inferred from this that the outer part of the Earth was strong and rigid. This inference seemed to be confirmed by the evidence of mountains. Rocks at the base of mountains like ten-kilometer-high Everest had to be able to withstand enormous stresses or they would crack and the mountains collapse. Because the height of any structure is limited by the
- (25) strength of its supporting materials, the stability of mountains seemed to corroborate the geophysicists' conclusion: the Earth was simply too strong for the continents to move.

There followed a classic confrontation, pitting

- (35) "movement" against "rigidity," which in retrospect need never have occurred. The "strength paradox" had been familiar to generations of geologists from the study of rock deformations in mountain belts, where it had been observed that some quite rigid
- (40) rocks had in the past been highly ductile, on occasion even viscous. But both geologists and geophysicists failed to connect this evidence with a phenomenon they knew in the context of practical problems of structural engineering: "creep." Creep
- (45) is observed in materials that are subjected to relatively low stresses for very long periods of time; the materials deform continuously, but very slowly, like fluids with an extremely high viscosity. The process operates most rapidly in materials near their melting point.
- (50)

Thus, before talking of the "strength" of rocks, both groups of scientists should have known something of the temperature of the rocks they were studying and should have specified the time scale under consideration. Rocks at the Earth's surface are between 600° and 1,000° C below their melting temperatures and thus creep so slowly that even on geological time scales of millions of years, they may be regarded as brittle and strong solids. Within the

(55) Earth, however, temperature increases relatively rapidly with depth and, below a few hundred kilometers, creep occurs so readily that on time scales of more than a few million years, rocks underneath the Earth's crust must be considered as fluids even though they are perfectly normal crystalline solids.

1. The author of the passage is primarily concerned with

(A) presenting new evidence  
(B) correcting an oversimplification  
(C) analyzing the reasons for a dispute  
(D) reinterpreting a theory  
(E) resolving a dispute between past and present views

2. It can be inferred from the passage that all of the following are true of the phenomenon of creep EXCEPT:

(A) The effects of creep on normal crystalline solids are always imperceptible.  
(B) The rate of creep is increased by raising the temperature of a solid.  
(C) Creep occurs even in relatively large geological structures.  
(D) Creep operates most rapidly on rocks near their melting point.  
(E) Creep occurs both on and below the Earth's surface.

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3. The passage suggests that the author considers the disagreement between early twentieth-century geologists and geophysicists to have been
  - (A) confusing
  - (B) inevitable
  - (C) surprising and inexplicable
  - (D) hostile but ultimately useful
  - (E) needless and unproductive
4. According to the passage, the theoretical position of early twentieth-century geologists was based on which of the following?
  - I. The shapes of the Earth's continents
  - II. The evidence of ductility in rocks
  - III. The fossil record
  - (A) I only
  - (B) III only
  - (C) I and II only
  - (D) I and III only
  - (E) I, II, and III
5. It can be inferred from the passage that which of the following statements best expresses the "strength paradox" (line 36)?
  - (A) Some rocks are rigid and brittle, whereas others are fluid and ductile depending on their chemical composition.
  - (B) Rocks at the base of mountains may be very rigid while rocks higher up the mountain are more fluid.
  - (C) The rigidity of the same rock can vary widely depending on the physical stresses acting on it.
  - (D) Rocks in some locations on the Earth's surface are far more rigid and brittle than are other rocks subjected to comparable stress.
  - (E) The strength of rocks in mountain belts varies according to the rate of creep in a particular location.
6. According to the author of the passage, geologists and geophysicists could have resolved their theoretical argument if they had
  - (A) more carefully reviewed the fossil evidence
  - (B) closely examined the physical appearance of the Earth's surface rock
  - (C) applied their knowledge of the effects of stress to the geological evidence
  - (D) known about the phenomenon of creep
  - (E) understood more completely the effects of phenomena such as earthquakes
7. The author suggests that the major reason for the disagreement between early twentieth-century geologists and geophysicists was that each group
  - (A) reached conflicting conclusions from separate analyses of the fossil record
  - (B) interpreted the evidence of rock deformations differently
  - (C) examined data on different kinds of phenomena
  - (D) based their respective theories on conflicting estimates of the Earth's age
  - (E) made different, though equally inaccurate, assumptions about the Earth's history
8. Which of the following best describes the organization of the passage?
  - (A) A particular view of a scientific issue is outlined and arguments against that view are stated.
  - (B) A theory is presented, relevant new evidence is discussed, and the theory is reinterpreted.
  - (C) A scientific dispute is examined and possible resolutions of the dispute are outlined.
  - (D) A hypothesis is stated and new evidence proving its validity is presented.
  - (E) A scientific dispute is summarized and reasons for its occurrence are offered.
9. Which of the following statements, if true, is most compatible with the principle underlying the geophysicists' citation of Mt. Everest as evidence for their theories?
  - (A) A one-hundred-story building must have a much stronger base than is necessary for a twenty-story building of similar materials.
  - (B) A thin external material like glass makes a skyscraper less vulnerable to stress from wind than does a thick material like brick.
  - (C) The girders supporting the ceilings and floors on higher levels of a multistory building must be stronger than those supporting ceilings and floors on lower levels.
  - (D) Multistory buildings in earthquake zones must obey height restrictions because of the probability of seismic stress.
  - (E) Buildings with foundations composed of relatively rigid materials are less subject to creep.

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- By the mid-nineteenth century, the conviction of early nineteenth-century European intellectuals and artists that the willful, energetic dynamism of the human imagination creates what we know of reality (5) was being reshaped. In philosophy, the adherents of positivism argued that nature is independent of the imagination and that knowledge consists only in the proper connection of sense data. Historians like von Ranke and Buckle argued that the existence of (10) "objective fact" enabled them to record with accuracy what actually happened in the past. And W. K. Clifford, in 1874, claimed that "all competent people" accept that sensation, thought, and emotion can be explained by "change in the condition of the matter" in the brain. (15)

- For the creative arts, the most influential evidence for an objective reality independent of the imagination came as a result of the rapid changes in photography during the 1850's. The immense effort (20) of the previous generation of Romantic poets and painters to undo the damage of empiricism by proving that the imagination creates reality was completely undermined. They had worked passionately to convince others that their versions of the (25) world were real, though hostile critics had found it easy to dispute such claims. Now, with the advent of photography, the painters' position became untenable. The mindless photograph challenged the poet or painter to deny that an objective, depictable (30) nature was out there separate from the mind.

- Painters, as if shamed by the precision of photographic images, began to paint not the greatest number of the greatest ideas, which art critic John Ruskin had held before them as a goal, but the (35) greatest amount of accurate surface detail. Art once again turned from the lamp within toward the skills required to mirror social reality.

- Novels of the mid-nineteenth century also show the effects of this growing concern with the "real" (40) external world. No matter how visionary their approach, novelists strove to convince readers of the real-life accuracy of their fictions. Novelists such as Trollope and Thackeray begin novels by pointing out that the romance of narrative and (45) extravagance of style practiced by their predecessors are eschewed in the present faithful account. In the preface to *Bleak House*, Dickens defends the

- symbolic episode of Krook's spontaneous combustion as documented fact, with "about thirty cases on record." (50)

- On the stage, there was increased concern with verisimilitude. The steady progress from artfulness to naturalness can be charted most graphically in opera. From formal arrangements of dance and (55) song, from mathematically arranged distortions and enhancements of human movements and human voice, opera moved step by step toward creating the illusion of real people engaged in real actions. The arias were absorbed increasingly into (60) the flow of the drama, and *verismo* opera was the predictable outcome.

10. According to the passage, those critical of Romantic poets and painters contended that the works of these artists

- (A) were too thoroughly influenced by empiricism
- (B) ignored the evidence of objective reality provided by photographs
- (C) presented a false representation of reality
- (D) failed to consider social reality
- (E) made no attempt to depict nature

11. It can be inferred that, in presenting an account of nineteenth-century thought, the author of the passage assumes which of the following?

- (A) Philosophers and historians in a given period directly influence the work of painters and novelists of that period.
- (B) Artists in any area of the creative arts imitate other artists in their area.
- (C) Realist artists are generally less sophisticated than are Romantic artists.
- (D) Trends in a particular artistic or intellectual area can often be related to concurrent trends in other areas.
- (E) The nineteenth century was radically different from the preceding century.

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12. The changes in mid-nineteenth century artistic expression, as they are described in the passage, would have been LEAST likely to result in which of the following?
- (A) An opera about the struggles of a group of young artists in Paris
  - (B) A drama about the unhappy marriage of an American woman and a European man
  - (C) A novel about the short-lived revolt of a group of coal miners in Wales
  - (D) A painting depicting the triumph in battle of a mythical Greek hero
  - (E) A painting of a street market in London
13. According to the passage, which of the following was one of the tenets held by Romantic artists?
- (A) Nature is best understood by the patient examination of small details.
  - (B) Reality is constituted by the action of the human mind.
  - (C) The function of art is to mirror social reality.
  - (D) The most important quality of any piece of art is the extravagance of its style.
  - (E) The form of art must express the function of its elements.
14. According to the passage, Ruskin recommended that painters concern themselves with
- (A) maintaining the independence of the imagination
  - (B) the representation of ideas
  - (C) accurate depiction of surface detail
  - (D) human activities
  - (E) the presentation of moral dilemmas
15. The author's use of the word "mindless" in line 28 implies that he believes that which of the following is true of mid-nineteenth-century views of photography?
- (A) The photographer was regarded as a creative artist.
  - (B) A photograph's content was regarded as completely uninfluenced by the photographer.
  - (C) It was believed that photographs could not be analyzed in the way paintings could.
  - (D) Technique was assumed to be less artistic in photography than in painting.
  - (E) It was believed that the relative accuracy of paintings and photographs should not be compared.
16. The passage implies by the phrase "to mirror social reality" (line 37) that mid-nineteenth-century painters attempted to
- (A) depict the truth of character behind the mask of physical appearance
  - (B) convey their own unique vision of people in social settings
  - (C) reproduce faithfully what they saw around them
  - (D) concentrate primarily on the refinement of technique
  - (E) intensify their imaginative visions by exaggerating surface detail
17. The author refers to Dickens (lines 47-50) to illustrate which of the following?
- (A) The degree to which nineteenth-century novelists wished to disassociate themselves from their predecessors
  - (B) The excessive faithfulness to detail that characterized Dickens' work
  - (C) The manner in which the development of photography influenced even nongraphic art
  - (D) The unbroken connection between positivist philosophers and the major novelists of the nineteenth century
  - (E) The extent to which nineteenth-century novelists wished to have their work defined as realistic

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Two trends emerge from the demographic data gathered throughout the eighteenth century in the northern section of the British colonies which would become the northeastern United States. First, the racial composition of the colonies' population changed between 1700 and 1750, because the Black population grew steadily and more rapidly than the White population. By 1750, Black people constituted about 5 percent of the population. They were concentrated in a few cities, some of which had a greater proportion of Black people in 1750 than in 1960. In 1746 more than one-fifth of New York City's population was Black. In 1755 Black people made up one-quarter of the population of Newport, Rhode Island, and one-seventh of the population of all Rhode Island. Second, the rate of growth of the Black population in northern colonies reached a peak sometime around 1750 and the Black population grew very slowly thereafter. The first United States census, taken in 1790 enumerated fewer Black people in Connecticut and Rhode Island than were counted by colonial censuses in 1750, and New York, Pennsylvania, and Massachusetts showed slow growth at best.

Several factors account for this slower growth rate. First, immigration of European workers increased after the Treaty of Paris was signed in 1783, and White employers preferred to hire European laborers. Second, the political situation was worrisome to many White people. A slave revolt in New York City in 1712 and an altercation in the same city in 1741 resulted in over 50 deaths—mostly of Black people—and caused some people to oppose the importation of more slaves to the northern colonies. Third, there was growing indignation about the holding of slaves. Quakers in Pennsylvania campaigned against the slave trade, and similar sentiments in New York, Connecticut, and Rhode Island led to the passage of anti-slave-trade laws. Massachusetts abolished slavery altogether.

Most important was the changing economic structure of the colonies. Ecological conditions in the South encouraged large-scale farming, and Southern plantation owners desiring to increase production faced a severe labor shortage. Thus, slaves were brought to the South, not the North. In the South, at the beginning of the eighteenth century, Black people were concentrated around the Tidewater area; by 1790 the southern Black population had increased to 35 percent of the total southern population. They were more widely dispersed geographically throughout the southern colonies and lived in rural areas for the most part.

Although all of the relevant information has been gathered, it is difficult to evaluate the reliability of these data. Reports of colonial administrators, estimates made by European travelers, and local censuses indicate that in 1700 the population of both the northern and southern colonies was 250,000, including 30,000 Black people.

In 1750 the total population was 1.2 million, of whom 250,000 were Black people. These figures imply that the Black population grew in excess of 4 percent per annum from 1700 to 1750, while the White population expanded by 3 percent each year. The first federal census, taken in 1790, counted 3.9 million Americans, 750,000 of whom were Black. This means that, from 1750 to 1790, the growth rate was approximately 3 percent annually for each race.

18. One of the main concerns of this passage is to account for the
  - (A) decrease in total population in northern cities after 1750
  - (B) slowing of the growth rate of the Black population of the northern colonies after 1750
  - (C) increasing urbanization of the northern colonies during the eighteenth century
  - (D) political unrest in northern cities in the late eighteenth century
  - (E) influence of agricultural innovation on the population of the northern colonies during the eighteenth century
19. All of the following are listed in the passage as sources for data about the colonial population in the eighteenth century EXCEPT
  - (A) local censuses
  - (B) travelers' accounts
  - (C) reports of colonial administrators
  - (D) birth and death records
  - (E) the national census
20. Of the following, which is the most likely source of this passage?
  - (A) A textbook on demographic analysis
  - (B) A history of the South before the Civil War
  - (C) An article on eighteenth-century demographic change in the United States
  - (D) An extended analysis of class and labor relations in the United States
  - (E) A history of immigration to the United States

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21. According to the passage, which of the following was a significant factor in European immigration to the United States in the eighteenth century?
  - (A) The increasing urbanization of the northern colonies throughout the eighteenth century
  - (B) The abolition of slavery in the northern colonies at the end of the eighteenth century
  - (C) The signing of the Treaty of Paris in 1783
  - (D) The growth of large-scale farming in the southern colonies
  - (E) Political unrest in the northern colonies
22. According to the passage, between 1700 and 1750, the growth rate of the total Black population exceeded that of the total White population by approximately how much per year?
  - (A) 1 percent
  - (B) 2 percent
  - (C) 3 percent
  - (D) 4 percent
  - (E) 5 percent
23. If the post-1750 population trends described in the passage had continued, which of the following could be an accurate description of the population of the United States in 1850?
  - (A) The urban population was smaller than it had been in the eighteenth century, but the rural population was larger.
  - (B) The proportions of Black people and White people were roughly equal in the North, but White people outnumbered Black people in the South.
  - (C) The size of the population of the United States and the proportions of Black people and White people were roughly equal to what they had been in 1790.
  - (D) The proportion of Black people in the rural South was higher than it was in the total population.
  - (E) The proportion of Black people in urban areas to White people in those same areas remained constant.
24. The passage suggests that census data gathered throughout the eighteenth century regarding the distribution and growth of the population could best be used to support which of the following claims?
  - (A) Industrialization was the chief contributing factor to the urbanization of the Black population.
  - (B) Agricultural expansion in the South was a contributing factor to the continuation of the slave trade.
  - (C) The population of the northern colonies grew more rapidly than that of the southern colonies.
  - (D) The abolition of slavery in Massachusetts contributed to a decline in the number of slaves in the total population.
  - (E) Records kept in the northern colonies were much more accurate than those kept in the southern colonies.
25. Of the following, which is the most appropriate title for this passage?
  - (A) The Urban Experience in the Pre-Revolutionary Period
  - (B) Conflicts in the Northern Colonies
  - (C) Demographic Trends in the Black Population
  - (D) The Expansion of Slavery
  - (E) Pre-Revolutionary Labor Trends in the North and South

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 3

Time—30 minutes

20 Questions

Directions: For each question in this section, select the best of the answer choices given.

Nineteenth-century art critics judged art by the realism of its method of representation. It was assumed that the realistic method developed from primitive beginnings to the perfection of formal realism. It is one of the permanent gains of the aesthetic revolution of the twentieth century that we are rid of this type of aesthetics.

It can be inferred from the passage above that the artistic revolution of the twentieth century had which of the following effects?

- (A) It deemphasized realistic representation as an evaluative consideration for judging works of art.
- (B) It permitted modern critics to appreciate the simplicity of primitive art.
- (C) It repudiated the realistic representation found in the art of the past.
- (D) It reinforced traditional ways of looking at and judging great art.
- (E) It allowed art critics to understand the evolution and nature of art.

In the United States between 1850 and 1880, the number of farmers continued to increase, but at a rate lower than that of the general population.

Which of the following statements directly contradicts the information presented above?

- (A) The number of farmers in the general population increased slightly in the thirty years between 1850 and 1880.
- (B) The rate of growth of the United States labor force and the rate of growth of the general population rose simultaneously in the thirty years between 1850 and 1880.
- (C) The proportion of farmers in the United States labor force remained constant in the thirty years between 1850 and 1880.
- (D) The proportion of farmers in the United States labor force decreased from 64 percent in 1850 to 49 percent in 1880.
- (E) The proportion of farmers in the general population increased from 68 percent in 1850 to 72 percent in 1880.

### Questions 3-4

Why save endangered species? For the general public, endangered species appear to be little more than biological oddities. A very different perception is gained from considering the issue of extinction in a wider context. The important point is that many major social advances have been made on the basis of life forms whose worth would never have been perceived in advance. Consider the impact of rubber-producing plants on contemporary life and industry: approximately two-thirds of the world's rubber supply comes from rubber-producing plants and is made into objects as diverse as rubber washers and rubber boots.

The author's point is made chiefly by

- (A) acknowledging the validity of two opposing points of view
- (B) appealing to the emotions of the audience rather than to their intellects
- (C) suggesting a useful perspective for viewing the question raised at the beginning of the passage
- (D) trying to discredit the view of an opponent without presenting an alternative hypothesis
- (E) generalizing from similar to dissimilar cases

All of the following facts could be used as illustrative examples in addition to the example of rubber-producing plants EXCEPT:

- (A) The discovery of the vaccine for smallpox resulted from observing the effect of the cowpox virus on the hands of dairy workers.
- (B) The major source of our pharmaceutical supplies is plants, some of them commonly thought of as weeds.
- (C) Certain antibiotics were originally derived from mold growing on cantaloupe.
- (D) Plastic is a unique product derived from petroleum and petroleum by-products.
- (E) Hamsters and other rodents have played an important role in laboratory tests of medicine for use on humans.

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5. Athletic director: "Members of our sports teams included, for the fall season, 80 football players and 40 cross-country runners; for the winter season, 20 wrestlers and 40 swimmers; for the spring season, 50 track-team members and 20 lacrosse players. Each team athlete participates in his or her sport five days a week for the whole three-month season, and no athlete is on two teams during any one season. Therefore, adding these figures, we find that our team sports program serves 250 different individual athletes."

In drawing the conclusion above, the athletic director fails to consider the relevant possibility that

- (A) athletes can be on more than one team in a single season
- (B) athletes can be on teams in more than one season
- (C) some of the team sports require a larger number of athletes on the team than do others
- (D) more athletes participate in team sports during one season than during another
- (E) an athlete might not participate in every one of the practice sessions and athletic contests in his or her sport

6. As soon as any part of a person's conduct affects prejudicially the interests of others, society has jurisdiction over it, and the question of whether the general welfare will or will not be promoted by interfering with it becomes open to discussion. If a person's conduct does not affect prejudicially the interests of others, it should not come under the jurisdiction of society in the first place.

The author in the passage above argues that

- (A) society is independent of the actions of individuals
- (B) the general welfare of a society is promoted when a person's conduct benefits others
- (C) conduct that does not infringe on the interests of others should not be under the jurisdiction of society
- (D) interference with the actions of individuals does not enhance the general welfare
- (E) in general, the interests of persons are mutually exclusive

7. Therapists find that treatment of those people who seek help because they are unable to stop smoking or overeating is rarely successful. From these experiences, therapists have concluded that such habits are intractable, and success in breaking them is rare.

As surveys show, millions of people have dropped the habit of smoking, and many people have successfully managed a substantial weight loss.

If all of the statements above are correct, an explanation of their apparent contradiction is provided by the hypothesis that

- (A) there have been some successes in therapy, and those successes were counted in the surveys
- (B) it is easier to stop smoking than it is to stop overeating
- (C) it is easy to break the habits of smoking and overeating by exercising willpower
- (D) the group of people selected for the survey did not include those who failed to break their habits even after therapy
- (E) those who succeed in curing themselves do not go for treatment and so are not included in the therapists' data

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Questions 8-9

"On the whole," Ms. Dennis remarked, "engineering students are lazier now than they used to be. I know because fewer and fewer of my students regularly do the work they are assigned."

8. The conclusion drawn above depends on which of the following assumptions?
  - (A) Engineering students are working less because, in a booming market, they are spending more and more time investigating different job opportunities.
  - (B) Whether or not students do the work they are assigned is a good indication of how lazy they are.
  - (C) Engineering students should work harder than students in less demanding fields.
  - (D) Ms. Dennis' students are doing less work because Ms. Dennis is not as effective a teacher as she once was.
  - (E) Laziness is something most people do not outgrow.
9. Which of the following identifies a flaw in Ms. Dennis' reasoning?
  - (A) Plenty of people besides engineering students do not work as hard as they should.
  - (B) Ms. Dennis does not consider the excuses her students may have for being lazy.
  - (C) The argument does not propose any constructive solutions to the problem it identifies.
  - (D) The argument assumes that Ms. Dennis' students are representative of engineering students in general.
  - (E) Ms. Dennis does not seem sympathetic to the problems of her students.

10. Popular culture in the United States has become Europeanized to an extent unimaginable twenty-five years ago. Not many people then drank wine with meals, and no one drank imported mineral water. No idea would have been more astonishing than that Americans would pay to watch soccer games. Such thoughts arise because of a report that the American Association of State Highway and Transportation Officials has just adopted a proposal to develop the country's first comprehensive interstate system of routes for bicycles.

Which of the following inferences is best supported by the passage?

- (A) Long-distance bicycle routes are used in Europe.
- (B) Drinking imported mineral water is a greater luxury than drinking imported wine.
- (C) United States culture has benefited from exposure to foreign ideas.
- (D) Most Europeans make regular use of bicycles.
- (E) The influence of the United States on European culture has assumed unprecedented proportions in the last twenty-five years.

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11. Each year, fires in the United States cause \$12 billion in property losses, insurance costs, fire-fighting expenses, and loss of worker productivity. These fire losses are seven times those of Japan on a per capita basis.

Which of the following, if true, would be LEAST likely to be a factor contributing to the difference between fire losses in Japan and those in the United States?

- (A) The walls of Japanese homes are made mostly of wood and bamboo and are more combustible than the walls in most American homes.
- (B) The rate of arson, a major contributor to fire statistics in the United States, is almost negligible in Japan.
- (C) Most Japanese homes, unlike those in the United States, are equipped with specially designed and effective fire-extinguishing equipment.
- (D) Foam-based and plastic furniture, less popular in Japan than in the United States, ignites readily and releases twice the heat energy of equivalent weights of natural fibers.
- (E) Japanese fire departments devote proportionately more personnel time to inspection, training, and public education than do United States fire departments.

12. Veteran screenwriters, aiming at creating a 120-page screenplay for a film, usually turn in a 135-page first draft. As one screenwriter put it, "That gives those in charge of the movie a chance to be creative when they get the script; at the very least, they can cut 15 pages."

The screenwriter's statement cited above conveys which of the following propositions?

- (A) Screenwriters for a film are generally not involved in any aspects of filmmaking besides providing the script.
- (B) Seasoned screenwriters are resigned to, and make allowance for, draft scripts being altered by those evaluating them.
- (C) Truly creative screenwriters are too temperamental to adhere to page limits set for their work.
- (D) It takes a special kind of creativity to recognize what is best left out of a film script.
- (E) Even experienced screenwriters cannot be expected to write scripts of consistently high quality throughout.

13. In the 1980 United States census, marital status was described under one of five categories: single, now married (but not separated), separated, divorced, widowed. In the category "separated," including both those who were legally separated and those who were estranged and living apart from their spouses, one million more women than men were counted.

Which of the following, if true, provide(s) or contribute(s) to an explanation for this result?

- I. There are more women of marriageable age than men of marriageable age in the United States.
- II. More of the separated men than separated women in the United States could not be found by the census takers during the census.
- III. Many more separated men than separated women left the United States for residence in another country.

- (A) I only
- (B) II only
- (C) III only
- (D) I and II only
- (E) II and III only

14. In recent years shrimp harvests of commercial fishermen in the South Atlantic have declined dramatically in total weight. The decline is due primarily to competition from a growing number of recreational fishermen, who are able to get young shrimp in the estuaries where they mature. Which of the following regulatory actions would be most likely to help increase the shrimp harvests of commercial fishermen?

- (A) Requiring commercial fishermen to fish in estuaries
- (B) Limiting the total number of excursions per season for commercial fishermen
- (C) Requiring recreational fishermen to use large-mesh nets in their fishing
- (D) Putting an upper limit on the size of the shrimp recreational fishermen are allowed to catch
- (E) Allowing recreational fishermen to move out of estuaries into the South Atlantic

15. The 38 corporations that filed United States income tax returns showing a net income of more than \$100 million accounted for 53 percent of the total taxable income from foreign sources reported on all tax returns. Sixty percent of the total taxable income from foreign sources came from the 200 returns reporting income from 10 or more countries.

If the statements above are true, which of the following must also be true?

- (A) Most of the total taxable income earned by corporations with net income above \$100 million was earned from foreign sources.
- (B) Wealthy individuals with large personal incomes reported 47 percent of the total taxable income from foreign sources.
- (C) Income from foreign sources amounted to between 53 and 60 percent of all reported taxable income.
- (D) Some of the corporations with net income above \$100 million reported income from 10 or more countries.
- (E) Most of the tax returns showing income from 10 or more countries reported net income of more than \$100 million.

16. The greatest chance for the existence of extra-terrestrial life is on a planet beyond our solar system. The Milky Way galaxy alone contains 100 billion other suns, many of which could be accompanied by planets similar enough to Earth to make them suitable abodes of life.

The statement above assumes which of the following?

- (A) Living creatures on another planet would probably have the same appearance as those on Earth.
- (B) Life cannot exist on other planets in our solar system.
- (C) If the appropriate physical conditions exist, life is an inevitable consequence.
- (D) More than one of the suns in the galaxy is accompanied by an Earth-like planet.
- (E) It is likely that life on another planet would require conditions similar to those on Earth.

17. A ten-year comparison between the United States and the Soviet Union in terms of crop yields per acre revealed that when only planted acreage is compared, Soviet yields are equal to 68 percent of United States yields. When total agricultural acreage (planted acreage plus fallow acreage) is compared, however, Soviet yield is 114 percent of United States yield.

From the information above, which of the following can be most reliably inferred about United States and Soviet agriculture during the ten-year period?

- (A) A higher percentage of total agricultural acreage was fallow in the United States than in the Soviet Union.
- (B) The United States had more fallow acreage than planted acreage.
- (C) Fewer total acres of available agricultural land were fallow in the Soviet Union than in the United States.
- (D) The Soviet Union had more planted acreage than fallow acreage.
- (E) The Soviet Union produced a greater volume of crops than the United States produced.

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18. A person who agrees to serve as mediator between two warring factions at the request of both abandons by so agreeing the right later to take sides. To take sides at a later point would be to suggest that the earlier presumptive impartiality was a sham.
- The passage above emphasizes which of the following points about mediators?
- (A) They should try to form no opinions of their own about any issue that is related to the dispute.
  - (B) They should not agree to serve unless they are committed to maintaining a stance of impartiality.
  - (C) They should not agree to serve unless they are equally acceptable to all parties to a dispute.
  - (D) They should feel free to take sides in the dispute right from the start, provided that they make their biases publicly known.
  - (E) They should reserve the right to abandon their impartiality so as not to be open to the charge of having been deceitful.
19. A study of attitudes toward prime-time television programs showed that programs with identical ratings in terms of number of people watching received highly divergent marks for quality from their viewers. This additional piece of information could prove valuable for advertisers, who might be well advised to spend their advertising dollars for programs that viewers feel are of high quality.

Which of the following, if true, supports the claim that information about viewers' perceptions of the quality of television programs could be valuable to advertisers?

- (A) The number of programs judged to be of high quality constituted a high percentage of the total number of programs judged.
- (B) Many of the programs judged to be of high quality were shown on noncommercial networks.
- (C) Television viewers more frequently remember the sponsors of programs they admire than the sponsors of programs they judge mediocre.
- (D) Television viewers tend to watch new programs only when those programs follow old, familiar programs.
- (E) Television viewers report that the quality of a television advertisement has little effect on their buying habits.

20. That social institutions influence the formation of character has become a generally accepted proposition. This doctrine views individuals as but compliant recipients of social influence: personalities are entirely the products of society, and at any point in life an individual's personality can be changed by management of the social world. Crime is said to exist only because society has in some ways failed in its responsibility to give every person the resources to lead a productive life. However, whereas it is true that extreme poverty forces some people to steal, it is obvious that some persons will commit crimes no matter how well society treats them.

Which of the following is implied by the "doctrine" (line 3) described in the passage above?

- (A) Social institutions may reflect personality as much as they shape it.
- (B) Social influence on personality is most strongly felt by the affluent.
- (C) The concentration of wealth in the hands of a privileged few accounts for the existence of crime.
- (D) Bringing about social reform is the most likely means of curtailing crime.
- (E) Less severe punishment of crime would be likely to result in more crime.

## Practices for GMAT Book 1

### SECTION 4

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. A certain club has 35 male members and 45 female members. Which of the following equals the ratio of the number of male members to the number of female members?  
(A) 7:16  
(B) 5:9  
(C) 5:7  
(D) 3:4  
(E) 7:9
2. The cost of sending a package is 30 cents per ounce in addition to a basic fee of 5 dollars. If integer  $x$  represents the weight in ounces of a certain package, which of the following represents the cost, in dollars, of sending the package?  
(A)  $5x + 0.30$   
(B)  $(5 + x)0.30$   
(C)  $5 - 0.30x$   
(D)  $0.30x + 5$   
(E)  $0.70x + 5$
3. If  $\frac{2}{7}$  of the 210 students in a class attended graduate school, what was the total number of students in the class who did not attend graduate school?  
(A) 42  
(B) 60  
(C) 105  
(D) 142  
(E) 150
4. Of the following products and quotients, which is closest to 10?  
(A)  $95.1 \div 98$   
(B)  $95.1 \div 9.8$   
(C)  $95.1 \div 0.98$   
(D)  $9.51 \times 9.8$   
(E)  $9.51 \times 98$

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**Practices for GMAT Book 1**

5. If a certain uninterrupted process that requires exactly 151 hours is started at 8:00 a.m. on Monday, then the process will end on the following
- (A) Sunday at 3 p.m.
  - (B) Sunday at 7 p.m.
  - (C) Monday at 12 noon
  - (D) Monday at 2 p.m.
  - (E) Saturday at 3 p.m.
6. What is the least common multiple of 3, 4, 5, and 8?
- (A) 480
  - (B) 240
  - (C) 120
  - (D) 105
  - (E) 60
7. On a certain tax form, the income tax due amounted to 25 percent of the taxable income. In addition, there was a surcharge equal to 10 percent of the income tax due. If the surcharge alone came to \$600, what was the taxable income?
- (A) \$6,000
  - (B) \$15,000
  - (C) \$18,000
  - (D) \$24,000
  - (E) \$60,000
8. If  $r$  and  $s$  are the two roots of the equation  $x^2 + 8x + 15 = 0$ , and  $r < s$ , what is the value of  $s - r$ ?
- (A) -8
  - (B) -2
  - (C) 2
  - (D) 7
  - (E) 8

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**Practices for GMAT Book 1**

9. Which of the following is equivalent to  $(1.17 \times 10^3) + (2.34 \times 10^4)$ ?

(A)  $1.404 \times 10^4$   
(B)  $2.457 \times 10^4$   
(C)  $3.51 \times 10^4$   
(D)  $3.51 \times 10^7$   
(E)  $2.457 \times 10^8$

10. Tom and Carlos begin to play a series of four games with 400 chips each. At the end of each game, there is a loser who must surrender half of his chips to the winner. If Tom wins only the first and third games, how many chips does he have after the payoff at the end of the fourth game?

(A) 200  
(B) 275  
(C) 400  
(D) 525  
(E) 550

11. A loaf of bread and 2 one-pound containers of butter cost a total of \$4.95. If a pound of butter costs \$0.90 more than a loaf of bread, how much does a pound of butter cost?

(A) \$1.05  
(B) \$1.58  
(C) \$1.95  
(D) \$2.03  
(E) \$2.93

12. If  $\frac{1}{10} + \frac{1}{20} = \frac{1}{R}$ , then  $R =$

(A)  $\frac{1}{30}$   
(B)  $\frac{3}{20}$   
(C)  $\frac{20}{3}$   
(D) 15  
(E) 30

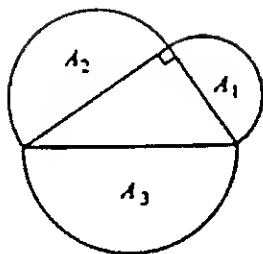
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## Practices for GMAT Book 1

13. A certain car dealership sells only full-size and mid-size cars. One of its sales representatives receives an annual salary of \$15,000. He also receives a commission of \$800 for each full-size car he sells and \$500 for each midsize car he sells. What is the least number of cars he must sell in a year to receive total annual earnings of exactly \$25,000?
- (A) 7  
(B) 12  
(C) 13  
(D) 14  
(E) 17
14. The water level in a rectangular swimming pool measuring 60 feet by 25 feet is to be lowered by 6 inches. How many gallons of water must be removed? (1 cu ft = 7.5 gallons)
- (A) 100  
(B) 250  
(C) 750  
(D) 1,200  
(E) 5,625
15. The series of numbers 3, 4, and 5 has the property that the square of the greatest number is equal to the sum of the squares of the other two numbers. Which of the following series of numbers does NOT have this property?
- (A) 0.6, 0.8, 1.0  
(B)  $\frac{3}{8}, \frac{1}{2}, \frac{5}{8}$   
(C)  $3\sqrt{2}, 4\sqrt{2}, 5\sqrt{2}$   
(D)  $\sqrt{3}, \sqrt{4}, \sqrt{5}$   
(E) 1.5, 2, 2.5
16. On a 20-mile course, Pat bicycled at an average rate of 30 miles per hour for the first 12 minutes and, without a break, ran the rest of the distance at an average rate of 8 miles per hour. How many minutes did Pat take to cover the entire course?
- (A) 75  
(B) 105  
(C) 117  
(D) 150  
(E) 162

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17. In the figure above, if  $A_1$ ,  $A_2$ , and  $A_3$  are the areas of the respective semicircular regions, what is the value of  $\frac{A_1 + A_2}{A_3}$ ?

(A) 1  
(B)  $\frac{3}{2}$   
(C)  $\frac{\pi}{2}$   
(D) 2  
(E)  $\frac{3\pi}{2}$

18. An investor bought  $n$  shares of Company  $X$  stock at \$75 per share. She sold 60 percent of the shares for \$120 per share and the rest at a later date for \$70 per share. If her gross profit on the sale of the  $n$  shares of stock was \$7,500, how many shares did she buy?

(A) 375  
(B) 300  
(C) 100  
(D) 95  
(E) 75

19. Which of the following integers equals the product of two prime numbers?

(A) 19  
(B) 27  
(C) 30  
(D) 41  
(E) 58

20. For any integer  $x$ ,  $\bar{x}$  is defined by the equation  $\bar{x} = x + 1$ . Which of the following is equal to  $(\bar{x})^2 - x^2$  for all integers  $x$ ?

(A) 0  
(B) 2  
(C)  $2\bar{x}$   
(D)  $2x$   
(E)  $2\bar{x}$

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 5

Time—30 minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise choose one of the others. Select the best version and blacken the corresponding space on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard-written English; that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence; this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. The line of descent of apes and humans is believed by most paleontologists that it split into several branches some time between 20 million and 5 million years ago.  
(A) that it split  
(B) to have split  
(C) to split  
(D) that they were split  
(E) to be split
2. Marshal Zhu De, commander of the Communist armies that conquered China, is so revered in the pantheon of revolutionary heroes that a memorial room was built for him in the Mao Zedong mausoleum.  
(A) so revered in the pantheon of revolutionary heroes that a memorial room was  
(B) so revered in the pantheon of revolutionary heroes as to have a memorial room that was  
(C) so revered in the pantheon of revolutionary heroes for a memorial room to be  
(D) revered enough in the pantheon of revolutionary heroes that a memorial room was  
(E) revered enough in the pantheon of revolutionary heroes for a memorial room to be
3. Alcohol may interfere with the ability of the brain cells as they form the proteins considered essential to short-term memory.  
(A) as they form  
(B) forming  
(C) in the formation of  
(D) to form  
(E) when they form
4. The Census Bureau reports that more than three-fifths of all married couples in the United States now have two incomes, significantly more than earlier decades did.  
(A) earlier decades did  
(B) earlier decades  
(C) in earlier decades  
(D) earlier decades have  
(E) that in earlier decades
5. Over 4,000 years ago, the inhabitants of pre-Columbian America built hundreds of cities with stone temples and palaces, colossal stone sculptures were erected, and they fashioned innumerable smaller artworks from precious jade and clay.  
(A) colossal stone sculptures were erected, and they fashioned innumerable smaller artworks  
(B) erected colossal stone sculptures, and they fashioned innumerable smaller artworks  
(C) erected colossal stone sculptures, and fashioned innumerable smaller artworks  
(D) colossal stone sculptures were erected, and innumerable smaller artworks were fashioned  
(E) erected colossal stone sculptures, and innumerable smaller artworks were fashioned

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6. Remembered for her 1902 exposé of the Standard Oil Company and her later portrait of John D. Rockefeller, President Theodore Roosevelt objected to Ida Tarbell in a wrathful outburst against "muck-rakers" in 1906.
- (A) President Theodore Roosevelt objected to Ida Tarbell in a wrathful outburst against "muck-rakers" in 1906
  - (B) in 1906 President Theodore Roosevelt objected to Ida Tarbell in a wrathful outburst against "muckrakers"
  - (C) in an outburst against "muckrakers" in 1906, Ida Tarbell was one of the objects of President Theodore Roosevelt's wrath
  - (D) Ida Tarbell was one of the objects of President Theodore Roosevelt's wrathful outburst against "muckrakers" in 1906
  - (E) one of the objects of President Theodore Roosevelt's wrathful outburst against "muck-rakers" in 1906 was Ida Tarbell
7. You could never find a surface solid enough to stand on Saturn because the planet is less dense than water.
- (A) solid enough to stand on Saturn
  - (B) on Saturn where it is solid enough to stand
  - (C) where it is solid enough that you can stand on Saturn
  - (D) on Saturn that is solid enough to stand
  - (E) that is so solid that one can stand on Saturn
8. Today anthropologists realize that there is great diversity among hunter-gatherer societies, and those that have persisted into this century had long before been altered by their contacts with agricultural peoples.
- (A) among hunter-gatherer societies, and those that have persisted
  - (B) among hunter-gatherer societies, and those persisting
  - (C) among hunter-gatherer societies and that those persisting
  - (D) between hunter-gatherer societies, and those that have persisted
  - (E) between hunter-gatherer societies and that those persisting
9. As generators of electricity, small, relatively inexpensive windmills shaped like eggbeaters have several advantages over large, propeller-shaped windmills: simplicity, reliability of stressed components, efficiency in converting wind energy, and beauty.
- (A) As generators of electricity, small, relatively inexpensive windmills shaped like eggbeaters have several advantages over large, propeller-shaped windmills:
  - (B) As generators of electricity, several advantages that small, relatively inexpensive windmills shaped like eggbeaters have over large, propeller-shaped windmills include
  - (C) Several advantages that small, relatively inexpensive windmills for generating electricity shaped like eggbeaters have over large, propeller-shaped windmills include
  - (D) Several advantages of small, relatively inexpensive windmills shaped like eggbeaters for generating electricity over large, propeller-shaped windmills include
  - (E) Small, relatively inexpensive windmills for generating electricity shaped like eggbeaters have the following several advantages over large, propeller-shaped windmills:
10. Today, because of improvements in agricultural technology, the same amount of acreage produces double the apples that it has in 1910.
- (A) double the apples that it has
  - (B) twice as many apples as it did
  - (C) as much as twice the apples it has
  - (D) two times as many apples as there were
  - (E) a doubling of the apples that it did

GO ON TO THE NEXT PAGE.

11. Designed to encourage debate, the long-standing "equal-time" rule for broadcasters has, some contend, actually stifled it.
- (A) the long-standing "equal-time" rule for broadcasters has, some contend, actually stifled it
  - (B) some contend that the long-standing "equal-time" rule for broadcasters has actually stifled it
  - (C) it has actually been stifled, some contend, by the long-standing "equal-time" rule for broadcasters
  - (D) some contend that it has actually been stifled by the long-standing "equal-time" rule for broadcasters
  - (E) actually, the long-standing "equal-time" rule for broadcasters has stifled it, some contend
12. If the ice of Greenland and Antarctica were to melt, the sea level would rise at least 100 feet or more.
- (A) If the ice of Greenland and Antarctica were to melt, the sea level would rise at least 100 feet or more.
  - (B) Were the ice of Greenland and Antarctica to melt, the sea level would rise at least 100 feet.
  - (C) If the ice of Greenland and Antarctica was to melt, the sea level would rise at least 100 feet or more.
  - (D) If the ice of Greenland and Antarctica was melting, the sea level would rise at least 100 feet.
  - (E) Should the ice of Greenland and Antarctica melt, the sea level would rise at least 100 feet or more.
13. On seeing Halley's comet in A.D. 66, the Jewish historian Josephus was persuaded that the apparition was a portent of the destruction of Jerusalem, which in fact took place four years later.
- (A) of the destruction of Jerusalem, which
  - (B) of Jerusalem being destroyed, which
  - (C) for Jerusalem being destroyed, and that
  - (D) for Jerusalem to be destroyed, and that
  - (E) for the destruction of Jerusalem, and it
14. Despite the increasing popularity among financial analysts of "operating cash flow" as a measure of a company's viability, a combination of six more conventional measures has been shown to be more accurate to predict business failure.
- (A) has been shown to be more accurate to predict business failure
  - (B) has been shown to predict business failure more accurately
  - (C) were shown to be more accurate to predict business failure
  - (D) have been shown to more accurately predict business failure
  - (E) have been shown to predict business failure more accurately
15. Japan is a culture of accommodation and constraint, a system of forms, etiquette, and images, making its ever-present congestion tolerable.
- (A) Japan is a culture of accommodation and constraint, a system of forms, etiquette, and images, making its
  - (B) Japan, a culture of accommodation and constraint, is a system of forms, etiquette, and images, which makes its
  - (C) A culture of accommodation and constraint, Japan is a system of forms, etiquette, and images making its
  - (D) Japan's is a culture of accommodation and constraint, a system of forms, etiquette, and images that makes the
  - (E) Japan's is a culture of accommodation and constraint, of a system of forms, etiquette, and images, which makes the

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

16. An effort to upgrade the health care of children begun two years ago is starting to save lives in dramatic numbers, according to the executive board of the United Nations Children's Fund.
- (A) to upgrade the health care of children begun two years ago
  - (B) begun two years ago for upgrading the health care of children
  - (C) begun two years ago to upgrade the health care of children
  - (D) at upgrading the health care of children begun two years ago
  - (E) that has begun two years ago to upgrade the health care of children
17. Evidence that landfills contaminate groundwater and that many landfills are reaching their capacity have led city planners to look for alternative methods of disposal.
- (A) that landfills contaminate groundwater and that many landfills are reaching their capacity have
  - (B) of landfills contaminating groundwater and that many landfills are reaching their capacity have
  - (C) of landfills contaminating groundwater and many landfills that are reaching their capacity has
  - (D) of landfills that contaminate groundwater and that many landfills are reaching their capacity has
  - (E) that landfills contaminate groundwater and that many landfills are reaching their capacity has
18. For several years, companies in the United States have increased spending for research far faster than the inflation rate.
- (A) far faster than the inflation rate
  - (B) exceeding by far the rate of inflation
  - (C) far faster than rising inflation
  - (D) far faster than the rising of the inflation rate
  - (E) at a rate far exceeding the rate of inflation
19. In the old Dutch settlement of Beverwyck—now Albany, New York—so many people were hurt and windows broken that an ordinance was issued forbidding golf in the streets.
- (A) broken that an ordinance was issued forbidding
  - (B) broken that they issued an ordinance to forbid
  - (C) were broken that they issued an ordinance forbidding
  - (D) had been broken that an ordinance was issued to forbid
  - (E) had been broken that an ordinance was issued forbidding
20. The National College Counseling Project charges that serious flaws in counseling and admissions are largely responsible for the 60 percent of students who enter a given college as freshmen and do not graduate from that institution.
- (A) for the 60 percent of students who enter a given college as freshmen and do not
  - (B) for the 60 percent of students entering a given college as freshmen who do not
  - (C) that 60 percent of the students entering a given college as freshmen do not
  - (D) for the failure of 60 percent of the students entering a given college as freshmen not to
  - (E) for the failure of 60 percent of the students who enter a given college as freshmen to
21. The rebuilding of the temples on the Acropolis was directed by the great statesman Pericles, who placed the sculptor Phidias in charge of the project.
- (A) who placed the sculptor Phidias in charge
  - (B) placing in charge the sculptor Phidias
  - (C) and the sculptor Phidias being the one placed in charge
  - (D) in charge there was the sculptor Phidias
  - (E) having the sculptor Phidias placed in charge

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## Practices for GMAT Book 1

22. Maine will face a serious shortage of timber by the year 2000, the result of a major infestation of spruce budworm, that much of Maine's spruce and fir forests are coming to maturity, and a rapid expansion of the paper business.
- (A) that much of Maine's spruce and fir forests are coming to maturity
  - (B) the coming to maturity of much of Maine's spruce and fir forests
  - (C) much of Maine's spruce and fir forests are coming to maturity
  - (D) Maine's spruce and fir forests, much of which is coming to maturity
  - (E) that maturity is coming to much of Maine's spruce and fir forests
23. The fifties, for all their advertised conformity, now appear to have been a time of considerable achievement in the arts.
- (A) for all their advertised conformity, now appear to have been
  - (B) despite all their advertised conformity, now appears to be
  - (C) for all their advertised conformity, now appear that they were
  - (D) despite all their advertised conformity, now appears as
  - (E) with all their advertised conformity, now appears
24. Jazz musicians, unlike those of most blues and spiritual musicians, moved in the same intellectual circles as have Black writers: Duke Ellington and Fats Waller counted themselves as part of the Harlem Renaissance of the 1920's.
- (A) those of most blues and spiritual musicians, moved in the same intellectual circles as have
  - (B) those of most blues and spiritual musicians, moved in the same intellectual circles as
  - (C) that of most blues and spiritual musicians, moved in the same intellectual circles as did
  - (D) most blues and spiritual musicians, moved in the same intellectual circles as did
  - (E) most blues and spiritual musicians, moved in the same intellectual circles as do
25. Jane Jacobs insists that nation-states, whatever its ideology, is an incompetent vehicle for creating or distributing wealth fairly.
- (A) its ideology, is an incompetent vehicle for creating or distributing wealth
  - (B) their ideology, is an incompetent vehicle for creating or distributing wealth
  - (C) its ideology, is an incompetent vehicle for creating wealth or distributing it
  - (D) its ideology, are incompetent vehicles for creating or distributing wealth
  - (E) their ideology, are incompetent vehicles for creating wealth or distributing it

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 7

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1.  $\frac{1}{2} + \left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^3 + \left(\frac{1}{2}\right)^4 =$ 
  - (A)  $\frac{1}{16}$
  - (B)  $\frac{7}{8}$
  - (C)  $\frac{15}{16}$
  - (D)  $\frac{31}{32}$
  - (E) 1
2. George is one of 500 people standing in line. If there are 345 people in front of George, how many people are behind him?
  - (A) 153
  - (B) 154
  - (C) 155
  - (D) 254
  - (E) 255
3. In a small town there were 3,400 registered voters, 40 percent of whom voted in an election. If Hawkins received 408 votes, what percent of the vote did he receive?
  - (A) 12%
  - (B) 15%
  - (C) 25%
  - (D) 30%
  - (E) 40%
4. If  $3x + 6 = 3(y + 4)$ , what is the value of  $x$  in terms of  $y$ ?
  - (A)  $y + 2$
  - (B)  $y + 4$
  - (C)  $y + 6$
  - (D)  $3y - 2$
  - (E)  $3y + 2$

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## Practices for GMAT Book 1

5. An operation  $*$  defined on whole numbers gives results such as the following:

$$\begin{aligned} 2 * 3 &= 7 \\ 3 * 4 &= 17 \\ 1 * 5 &= 6 \\ 0 * 6 &= 1 \end{aligned}$$

According to the equations above, which of the following could define the operation  $*$ ?

- (A)  $x * y = x + y$
- (B)  $x * y = 2x + y$
- (C)  $x * y = y^2 - x$
- (D)  $x * y = x^2 + y$
- (E)  $x * y = xy + 1$

6. For each hour worked in excess of 40 hours per week, a mechanic is paid  $1\frac{1}{2}$  times her regular rate of \$12 per hour. Her gross pay for a week in which she works 52 hours is equal to her pay at the regular rate for how many hours?

- (A) 58
- (B) 64
- (C) 66
- (D) 70
- (E) 78

7. If  $n$  red pencils cost 10 cents each and  $m$  blue pencils cost 9 cents each, what is the average (arithmetic mean) cost, in cents, per pencil?

- (A)  $\frac{19(n + m)}{2}$
- (B)  $\frac{10n + 9m}{19}$
- (C)  $\frac{10n + 9m}{n + m}$
- (D)  $\frac{n + m}{2}$
- (E)  $\frac{19}{n + m}$

8. Each of the 750 students at a certain school is taking history or mathematics or both. If 489 students are taking history and 606 students are taking mathematics, how many students are taking both?

- (A) 117
- (B) 144
- (C) 261
- (D) 345
- (E) 489

GO ON TO THE NEXT PAGE.

$$\begin{aligned}x &= 0.9 \\y &= \frac{1}{0.9} \\z &= (0.9)^2\end{aligned}$$

9. The values of  $x$ ,  $y$ , and  $z$  are shown above. Which of the following gives these numbers in order from least to greatest?

(A)  $x, y, z$   
(B)  $x, z, y$   
(C)  $y, z, x$   
(D)  $z, y, x$   
(E)  $z, x, y$

	Event 1	Event 2	Event 3
First Place 6 points	Team A	Team C	
Second Place 3 points	Team C	Team B	
Third Place 1 point	Team B	Team A	

10. The table above shows the results of the first two events in a competition that involved three teams and three events. If there are no disqualifications, what is the greatest possible difference in points between the total scores of any two teams after the third event?

(A) 15  
(B) 10  
(C) 8  
(D) 7  
(E) 5

11. If  $(-2, k)$  is a point on the graph of  $y = 2x^2 - 3x + 1$ , then  $k =$

(A) -13  
(B) -1  
(C) 3  
(D) 11  
(E) 15

12. The price of a certain product increased by the same percent from 1960 to 1970 as from 1970 to 1980. If its price of \$1.20 in 1970 was 150 percent of its price in 1960, what was its 1980 price?

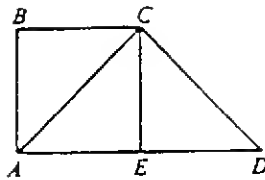
(A) \$1.80  
(B) \$2.00  
(C) \$2.40  
(D) \$2.70  
(E) \$3.00

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**Practices for GMAT Book 1**

13. An entertainer signed a contract to do 40 scheduled performances at a certain club. Under the terms of the contract, she receives \$20,000 for each completed performance, but pays a fine of \$8,000 for each cancelled performance. If the entertainer received \$380,000 from this contract, how many of the scheduled performances were cancelled?
- (A) 5  
(B) 15  
(C) 20  
(D) 25  
(E) 35
14. If  $\frac{1}{p} + \frac{1}{q} = 1$ , which of the following is true?
- (A)  $\frac{1}{p^2} + \frac{1}{q^2} = 1$   
(B)  $\frac{q}{p} + \frac{p}{q} = 1$   
(C)  $p + q = 1$   
(D)  $pq = p + q$   
(E)  $pq = q - p$
15. A certain test consists of 8 sections with 25 questions, numbered from 1 to 25, in each section. If a student answered all of the even-numbered questions correctly and  $\frac{3}{4}$  of the odd-numbered questions correctly, what was the total number of questions he answered correctly?
- (A) 150  
(B) 172  
(C) 174  
(D) 175  
(E) 176
16. The value of  $\sqrt{2^5 \cdot 3^2 \cdot 5^4}$  is between which of the following pairs of numbers?
- (A) 0 and 100  
(B) 100 and 200  
(C) 200 and 300  
(D) 300 and 400  
(E) 400 and 500

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17. In the figure above, square region  $ABCE$  and triangular region  $ACD$  each have area 36. What is the perimeter of triangle  $ACD$ ?
- (A) 24  
(B)  $12 + 12\sqrt{2}$   
(C) 36  
(D)  $18 + 18\sqrt{2}$   
(E)  $36\sqrt{2}$
18. How many gallons of milk that is 10 percent butterfat must be added to 8 gallons of milk that is 35 percent butterfat to obtain milk that is 20 percent butterfat?
- (A) 6  
(B) 12  
(C) 14  
(D) 16  
(E) 28
19. What is the smallest positive integer by which 126 can be multiplied so that the product is the square of an integer?
- (A) 4  
(B) 7  
(C) 9  
(D) 14  
(E) 126
20. A square board that has an area of 25 square inches is to be cut into pieces, each of which is a square with sides of length 1, 2, or 3 inches. What is the least number of such square pieces into which the board can be cut?
- (A) 5  
(B) 6  
(C) 7  
(D) 8  
(E) 9

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Practices for GMAT

## Book 1

# Test 2



## Practices for GMAT Book 1

### SECTION I

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1.  $\frac{1}{20} + \frac{1}{21} =$   
(A)  $\frac{1}{420}$  (B)  $\frac{1}{41}$  (C)  $\frac{1}{22}$  (D)  $\frac{2}{41}$  (E)  $\frac{41}{420}$
2. If 50 tomatoes weigh a total of 30 pounds and cost 35 cents per pound, what is the cost per tomato?  
(A) 17 cents (B) 21 cents (C) 24 cents  
(D) 28 cents (E) 35 cents
3. Millie and Rick addressed 150 invitations. If Millie addressed  $1\frac{1}{2}$  times as many as Rick addressed, how many of the invitations did Rick address?  
(A) 30 (B) 60 (C) 75 (D) 90 (E) 100
4. In 1982 a certain company had losses of \$10,000 per month. In the first three months of 1983, this company had gains of \$4,000 per month. On the average, what would the company need to gain per month in the remainder of 1983 in order to break even over this two-year period?  
(A) \$9,000 (B) \$10,800 (C) \$12,000  
(D) \$13,500 (E) \$18,000

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5. A certain jar contains only 1-cent, 5-cent, 10-cent, and 25-cent coins and more than one of each kind. If Pat took three coins from the jar, which of the following could NOT be the total value of the three coins?

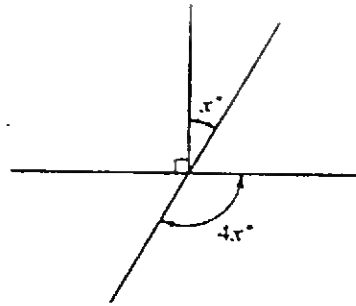
(A) \$0.36  
(B) \$0.45  
(C) \$0.51  
(D) \$0.60  
(E) \$0.61

6. A person purchased 200 shares of stock  $X$  priced at  $27\frac{1}{8}$  per share and 100 shares of stock  $Y$  priced at  $45\frac{3}{4}$  per share. The next day the prices per share were 27 and  $45\frac{1}{4}$ , respectively. If these figures represent dollar values, what was the one-day decrease in the total price of the 300 shares?

(A) \$75.00 (B) \$62.50 (C) \$37.50  
(D) \$25.00 (E) \$12.50

7. A mouse treated with a certain growth hormone weighs  $1\frac{1}{2}$  ounces, and an untreated mouse weighs  $\frac{3}{4}$  ounce. The weight of the treated mouse is what percent of the weight of the untreated mouse?

(A) 50% (B) 112.5% (C) 150%  
(D) 200% (E) 225%



8. In the figure above, what is the value of  $x$ ?

(A) 18 (B) 30 (C) 36 (D) 40 (E) 45

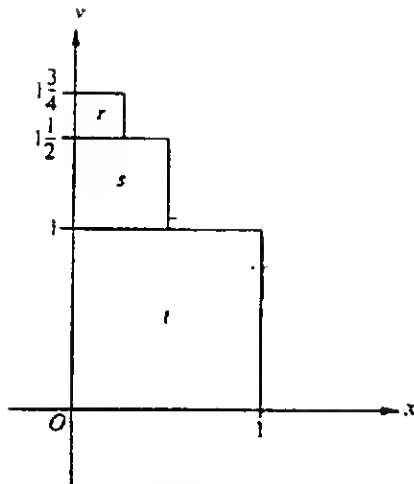
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**Practices for GMAT Book 1**

9. The sum of three consecutive odd integers,  $x$ ,  $y$ , and  $z$ , in ascending order, is 39. What is the sum of the three consecutive odd integers that immediately follow  $z$ ?
- (A) 78  
(B) 57  
(C) 48  
(D) 45  
(E) 42
10. Economists have projected that from 1980 to 1990 there will be a 49.6 percent increase in the number of food-service workers in the United States. If there were  $x$  such workers in 1980, then the number projected for 1990 is closest to
- (A)  $\frac{3x}{2}$  (B)  $\frac{7x}{5}$  (C)  $\frac{4x}{3}$  (D)  $\frac{x}{2}$  (E)  $\frac{2x}{5}$
11. If  $x : y = 2 : 3$ ,  $y : z = 3 : 4$ , and  $x = 8$ , then  $z - y =$
- (A) 1 (B) 4 (C) 6 (D) 8 (E) 12
12. If  $x > 0$  and  $\sqrt{9x + 36} = x$ , then  $x =$
- (A) 3 (B) 4 (C) 6 (D) 9 (E) 12
13. A coffee merchant makes a house blend of coffee using 4 pounds of Arabian beans costing \$3 per pound, 2 pounds of Java beans costing \$4 per pound, and 4 pounds of Brazilian beans costing \$1 per pound. If the merchant sold all of the blend for 50 percent more than the total cost of the beans used, at what price per pound was the blend sold?
- (A) \$1.20 (B) \$2.40 (C) \$3.00  
(D) \$3.60 (E) \$4.50

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14. If  $r$ ,  $s$ , and  $t$  are the areas of the square regions shown above, what is the value of  $\frac{r}{r+s+t}$ ?
- (A)  $\frac{49}{101}$  (B)  $\frac{7}{17}$  (C)  $\frac{1}{8}$  (D)  $\frac{1}{16}$  (E)  $\frac{1}{21}$
15. The number  $\frac{3}{4}$  is what fraction of its reciprocal?
- (A)  $\frac{9}{16}$  (B)  $\frac{3}{4}$  (C) 1 (D)  $\frac{4}{3}$  (E)  $\frac{16}{9}$
16. Each machine of type  $A$  has 3 steel parts and 2 chrome parts. Each machine of type  $B$  has 4 steel parts and 7 chrome parts. If a certain group of type  $A$  and type  $B$  machines has a total of 20 steel parts and 22 chrome parts, how many machines are in the group?
- (A) 2 (B) 3 (C) 4 (D) 6 (E) 9
17. If the length and width of a rectangular diagram 12 inches by 8 inches are to be reduced by the same percent so that the diagram will exactly fit into a rectangular space 4.5 inches by 3 inches, by what percent should the dimensions be reduced?
- (A) 25% (B) 37.5% (C) 62.5%  
(D) 75% (E) 87.5%

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18.  $\frac{\sqrt{3969}}{\sqrt{0.003969}} =$

- (A) 0.000001
- (B) 0.001
- (C) 0.1
- (D) 1.000
- (E) 1,000.000

19. If  $n$  is a positive integer greater than 1, then  $2^{n-1} + 2^n =$

- (A)  $3^n$
- (B)  $2^{n+1}$
- (C)  $2^{2n-1}$
- (D)  $2^{n(n-1)}$
- (E)  $3 \cdot 2^{n-1}$

20. A manufacturer can save  $x$  dollars per unit in production costs by overproducing in certain seasons. If storage costs for the excess are  $y$  dollars per unit per day ( $x > y$ ), which of the following expresses the maximum number of days that  $n$  excess units can be stored before the storage costs exceed the savings on the excess units?

- (A)  $x - y$  (B)  $(x - y)n$  (C)  $\frac{x}{y}$
- (D)  $\frac{xn}{y}$  (E)  $\frac{x}{yn}$

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 2

Time — 30 minutes

20 Questions

**Directions:** For each question in this section, select the best of the answer choices given.

1. The average after-tax income for a household was 2.4 percent higher in 1983 than in 1982. At the same time, average after-tax income declined for households at the lower- and middle-income levels.

Which of the following can be most reasonably inferred from the information above?

- (A) There were more households overall in 1983 than in 1982.
- (B) There were fewer households at the upper-income level in 1983 than in 1982.
- (C) Total after-tax income for all households at the lower- and middle-income levels was higher in 1983 than in 1982.
- (D) Average after-tax income for households at the upper-income level rose by more than 2.4 percent between 1982 and 1983.
- (E) Average after-tax income for households at the lower- and middle-income levels was declining prior to 1982.

2. A study of attitudes toward new cars showed that cars that were identical in every respect except color received widely differing ratings for quality from potential buyers. Therefore, in future advertisements for cars of high quality, we can expect to see no variety in the color of car featured.

Which of the following is an assumption made in the passage above?

- (A) If a car in a preferred color is not available, a buyer is usually willing to accept the car in another color.
- (B) New cars differ significantly from each other with respect to quality.
- (C) There is a single color generally associated with the highest quality rating in the study.
- (D) An advertisement for a particular car should display all of its significant advantages.
- (E) Potential buyers give more weight to color than to price in making a decision about a car.

3. Sometime during the 1950's, rock music permanently ousted jazz from the music scene. This is evident from the behavior of youths of that time. In crowded nightclubs they would applaud rock acts enthusiastically. But when a jazz act began, they went outside and got refreshments. They came back in only when the jazz set was finished.

Which of the following statements, if true, is a valid objection to the conclusion drawn above?

- (A) Jazz is the most important musical contribution of the United States to world culture.
- (B) Although some young people who attended nightclubs in the 1950's did try to listen to jazz, they eventually became bored with it.
- (C) Since the 1960's, rock music has not only provided youths with recreation but has, as well, become a rallying point for making social statements.
- (D) Although by 1960 jazz performances were less popular, there has since been a revival of interest in jazz among middle-class professionals.
- (E) Jazz steadily increased in popularity between the 1930's and the 1950's.

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4. Because of rules imposed by the Federal Drug Administration restricting the sale of thalidomide, many people who have trouble sleeping turn to barbiturates. Yet each year barbiturate-alcohol interactions cause the deaths of over a thousand people who probably would have lived had they used thalidomide instead of barbiturates, even without changing their alcohol consumption.

Which of the following statements about thalidomide is best supported by the statements above?

- (A) Thalidomide alone poses no serious health risks.
  - (B) Barbiturates alone are more dangerous than alcohol alone.
  - (C) Thalidomide is a more effective sleeping aid than barbiturates.
  - (D) In some cases, the thalidomide-barbiturate interaction would be less dangerous than the barbiturate-alcohol interaction.
  - (E) In some cases, the thalidomide-alcohol interaction would be less life-threatening than the barbiturate-alcohol interaction.
5. Existing United States landfills are rapidly approaching the limits of their capacity. Landfills can leach toxins into groundwater, polluting it. Instead of creating more landfills, solid-waste managers should recycle as much trash as possible and then incinerate the remainder. This will keep future environmental damage to a minimum.

Which of the following is an assumption on which the argument made above is based?

- (A) Future landfills will pollute the environment more than do those that already exist.
- (B) After existing landfills reach the limit of their capacity, they are closed, and the leaching of toxins from these sites decreases.
- (C) Reducing the volume of trash through recycling will not lessen future environmental danger unless the remaining trash is subsequently incinerated.
- (D) The environmental damage caused by the proposed incineration of trash would be less than that caused by the leaching of toxins from new landfills into groundwater.
- (E) No new landfill sites can be found in order to increase the total capacity of landfills in the United States.

6. According to a 1980 survey, ten percent of all United States citizens over the age of sixteen are functionally illiterate. Therefore, if the projection that there will be 250 million United States citizens over sixteen in the year 2000 is correct, we project that 25 million of these citizens will be functionally illiterate.

Which of the following, if true, would most weaken the conclusion drawn by the author of the passage above?

- (A) The percentage of high school graduates who do not go on to college has grown steadily over the past two decades.
- (B) From 1975 to 1980 there was a three-percent decrease in the rate of functional illiteracy among United States citizens over the age of sixteen.
- (C) Many United States citizens included in the 1980 survey would also be included in a survey conducted in the year 2000.
- (D) Surveys that are improperly designed usually provide inaccurate results.
- (E) In 1980 sixty-five percent of all United States citizens were over the age of sixteen.

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7. In a study of more than 8,000 people using ten beaches on two of the Great Lakes, ecologists from the University of Toronto determined that the rate of respiratory and gastrointestinal illness among people who had been swimming was 69.6 per 1,000, whereas the respiratory and gastrointestinal illness rate among those who had not been swimming was only 29.5 per 1,000.

Which of the following conclusions can be most properly drawn from the data above?

- (A) People tend to underestimate the risks of swimming in these lakes.
- (B) Respiratory and gastrointestinal illnesses occur at a higher rate as a result of swimming in either of these lakes than they do as a result of swimming in any other lake.
- (C) Illnesses of kinds other than respiratory and gastrointestinal are not likely to be associated with swimming in either of these lakes.
- (D) The association between swimming in these lakes and respiratory and gastrointestinal illness is some evidence for a causal relationship between them.
- (E) A large percentage of the people who swim in these lakes are immune to the diseases that swimming may cause.

8. The story of Robinson Crusoe's adventures on an uninhabited island is no longer as popular as it once was, nor does it inspire modern versions in popular fiction. This change in the reading public's taste has occurred because it is no longer easy to believe that undiscovered, uninhabited islands still exist.

The author's reasoning about the decreased popularity of Robinson Crusoe-like adventures in popular fiction is based on which of the following assumptions?

- (A) Readers of popular fiction no longer wish to exchange their current lives for lives freed from the demands made on them by other people.
- (B) Readers of popular fiction prefer settings that they can readily accept as plausible contemporary settings.
- (C) The most satisfying type of popular fiction is that which enables the reader to participate vicariously in another person's adventures.
- (D) As a result of media coverage, more people are acquainted with foreign locales today than at any time in the past.
- (E) Readers of popular fiction are found among people with diverse interests, with the result that no single type of fiction appeals to all.

9. Substances suspected of causing cancer, if carefully administered to experimental animals in quantities in which those substances are ordinarily present in the environment, are virtually guaranteed not to produce cancer at rates significantly above the chance level. The most economical procedure for obtaining informative data is to administer vastly increased amounts of the substance being tested.

The 'economical procedure' described above will not be an effective one if which of the following is true?

- (A) Cancer data on experimental animals yield accurate estimates of the risk of cancer for human beings.
- (B) Experimental animals will often develop cancer in response to receiving excessive quantities of a substance, regardless of the specific properties of the substance.
- (C) When more of a possibly cancer-causing substance is administered to experimental animals, fewer animals are needed for significant data to be obtained.
- (D) Among experimental animals, the chance level for many types of cancer is virtually zero.
- (E) Substances will often be tested in amounts greater than necessary to obtain informative data.

10. **Employee Complaint:** There are not enough parking spaces in the employee parking lot to accommodate all the people who work here.

**Employer's Response:** There is no truth to the complaint. No one who gets to work on time has trouble finding a parking space. Only if you are late to work are you unlikely to be able to find a space.

Which of the following, if true, gives the reason why the employer's response fails to address the substance of the issue raised in the complaint?

- (A) Each employee does not drive his or her own car to work.
- (B) The employer is not obligated to provide parking spaces for all employees.
- (C) On days when all employees arrived at work on time, there would be insufficient parking spaces.
- (D) On days when a large number of employees were late to work, many of the latecomers would be able to find parking spaces.
- (E) The number of employees who come to work each day is not always the same.

11. A dog hears higher pitches than a human hears; a cat has a greater capacity to see in dim light than a human normally has; a platypus picks up weak electric signals to which a human is normally insensitive.

Which of the following conclusions can be properly drawn from the statements above?

- (A) Most animals have sensory capacities superior to those demonstrated by humans.
- (B) Some animals have sensory capacities that are different from those of humans.
- (C) During evolution the eyes and ears of human beings were modified to make human sense perception less acute.
- (D) Researchers should not be surprised to find that all the sensory capacities of platypuses are greater than any of those demonstrated by humans.
- (E) Any human who can see in dim light does so less well than any cat.

12. In the early 1970's, when art reached its current high levels of popularity and value, a rash of thefts of works by great artists occurred in major art museums around the world. But, after 1975, sophisticated new security systems were installed in every major museum. As a consequence, important thefts in major museums declined markedly.

Which of the following, if true, is strongest if offered as part of the evidence to show that improved security systems were responsible for the decline in thefts of important works from major museums?

- (A) The typical art work stolen during both the 1970's and the 1980's was a small piece that could be concealed on the person of the thief.
- (B) Premiums paid by major museums to insure their most important works of art increased considerably between 1975 and 1985.
- (C) The prices paid to art thieves for stolen works were lower during the 1980's than the prices paid to art thieves for comparable works during the 1970's.
- (D) Thefts from private collections and smaller galleries of works by great artists increased sharply starting in the late 1970's.
- (E) Art thefts in Europe, which has the largest number of works by great artists, outnumbered art thefts in the United States during the 1980's.

13. The government's recent policy of reducing payments to hospitals and physicians will, in the long run, actually cost the public more. Every dollar saved by initially providing lower-quality services eventually leads to several dollars spent in caring for subsequent complications.

Which of the following best serves as an assumption that would make the argument above logically correct?

- (A) The government is more concerned about limiting its costs than about the well-being of its citizens.
- (B) The government will be unwilling to pay for the complications that arise from providing inadequate health care.
- (C) The government believes that the provision of lower-quality services need not result in an increase in complications.
- (D) Hospitals and physicians will respond to reduced payments by reducing the quality of care they give.
- (E) Hospitals and physicians are paid too much money for the services they provide to the public.

14. Researchers studying sets of identical twins who were raised apart in dissimilar environments found that in each case the twins were similar in character, medical history, and life experiences. The researchers saw these results as confirmation of the hypothesis that heredity is more important than environment in determining human personalities and life histories.

The existence of which of the following would tend to weaken the support for the hypothesis above most seriously?

- (A) A set of identical twins raised together who are shown by appropriate tests to have very similar value systems
- (B) A pair of identical twins raised apart who differ markedly with respect to aggressiveness and other personality traits
- (C) A younger brother and older sister raised together who have similar personalities and life experiences
- (D) A mother and daughter who have the same profession even though they have very different temperaments
- (E) A pair of twins raised together who have similar personality traits but different value systems

15. Because the process of freezing food consumes energy, many people keep their electric freezers half-empty, using them only to store commercially frozen foods. Yet freezers that are half-empty often consume more energy than they would if they were kept fully stocked.

Which of the following, if true, contributes most to an explanation of the apparent discrepancy described above?

- (A) A given volume of air in a freezer requires much more energy to be maintained at a temperature below freezing than does an identical volume of frozen food.
- (B) The more often a freezer's door is opened, the more energy is required to maintain that freezer's normal temperature.
- (C) When unfrozen foods are placed in a freezer, the average temperature of a given volume of air inside that freezer rises temporarily.
- (D) A person who normally maintains a half-empty freezer can cut energy costs considerably by using a freezer that is 50 percent smaller.
- (E) An electric freezer can operate efficiently only if chilled air is free to circulate within the freezing compartment.

16. People often do not make decisions by using the basic economic principle of rationally weighing all possibilities and then making the choice that can be expected to maximize benefits and minimize harm. Routinely, people process information in ways that are irrational in this sense.

Any of the following, if true, would provide evidence in support of the assertions above EXCEPT

- (A) People tend to act on new information, independent of its perceived relative merit, rather than on information they already have.
- (B) People prefer a major risk taken voluntarily to a minor one that has been forced on them, even if they know that the voluntarily taken risk is statistically more dangerous.
- (C) People tend to take up potentially damaging habits even though they have clear evidence that their own peers as well as experts disapprove of such behavior.
- (D) People avoid situations in which they could become involved in accidents involving large numbers of people more than they do situations where single-victim accidents are possible, even though they realize that an accident is more likely in the latter situations than in the former.
- (E) People usually give more weight to a physician's opinion about the best treatment for a disease than they do to the opinion of a neighbor if they realize that the neighbor is not an expert in disease treatment.

17. Statistics over four consecutive years showed that four percent more automobile accidents happened in California during the week following the switch, to daylight saving time and during the week following the switch back to standard time than occurred the week before each event. These statistics show that these time changes adversely affect the alertness of California drivers.

The conclusion in the argument above is based on which of the following assumptions?

- (A) Drivers in California as well as those in the rest of the United States have similar driving patterns.
- (B) The observed increases in accident rates are due almost entirely to an increase in the number of minor accidents.
- (C) Four years is not a sufficiently long period of time over which to judge the phenomenon described.
- (D) There are no other factors such as school vacations or holiday celebrations that cause accident rates to rise during these weeks.
- (E) A time change at any other time of year would not produce a similar increase in accident rates.

18. On the basis of figures it compiles, a citizens' group argues that congressional members of Party X authorize the spending of more taxpayer dollars than do congressional members of Party Y. The group's figures are based on an analysis of the number of spending bills for which members of Congress vote.

The figures of the citizens' group will be unreliable as a gauge of which party in Congress spends more taxpayer dollars if which of the following is true?

- (A) The group weighs all votes for spending bills equally, no matter how much taxpayer money is involved in each bill.
- (B) The group counts votes for all spending bills, including bills concerning the salaries of members of Congress.
- (C) Most spending bills that are introduced in Congress are passed by Congress.
- (D) Most spending bills that members of Party X vote for are written and sponsored by members of Party X.
- (E) All spending bills, before being voted on by Congress, must be approved by committees in which members of both parties participate.

19. Since 1945 there have been numerous international confrontations as tense as those that precipitated the Second World War, and yet no large-scale conflict has resulted. To explain this, some argue that fear of enormous destruction such as the Second World War produced has had a dramatic deterrent effect.

Which of the following, if true, most seriously weakens the deterrent theory mentioned above?

- (A) After the First World War, the fear of great future destruction was as intense as it was after the Second World War.
- (B) Psychologists have determined that the fear of retaliation tends to temper aggressiveness among human beings.
- (C) The Second World War was far less destructive than most people generally believe.
- (D) Fear of repeating the levels of destruction that the Second World War produced is as pervasive today as it was forty years ago.
- (E) Many of the international confrontations that have occurred since 1945 have involved countries that participated in the Second World War.

20. X: When a rare but serious industrial accident occurs, people respond by believing that such accidents are becoming more frequent. This belief is irrational. After all, being dealt four aces in a hand of poker, a rare event, hardly increases one's chances of being dealt four aces in a future hand.

Y: To the contrary, the belief is rational because it results in people's sensing a danger to themselves not previously sensed and taking precautionary actions to prevent similar accidents in the future.

Y's attempt to counter X's claim is best described by which of the following?

- (A) It questions the aptness of the analogy drawn by X.
- (B) It makes apparent X's failure to consider how people vary in their responses to a serious accident.
- (C) It shifts the basis for judging rationality to utility considerations of utility.
- (D) It offers an alternative explanation of why people form incorrect beliefs.
- (E) It challenges X's assumption that the occurrence of a single event is sufficient to change a belief.



SECTION 3

Time—30 minutes

25 Questions

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and blacken the corresponding space on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

- Recent scholarship has argued that the formation and expansion of states in South American pre-Columbian cultures limited the authority and autonomy of women. An example often cited in support of this argument is the formation and expansion of the Incan empire between 1438 and 1532, the year of the Spanish conquest. In pre-Incan Andean communities, ultimate control over all productive resources was vested in the community. Membership in the community, based on kinship, provided constituents, both men and women, with access to these resources. The community apportioned land on the basis of household size, and the right to use various lands was passed by inheritance from one generation to the next. Although women relinquished their portion of land when they married, marriage enabled them to acquire other land and goods essential to establishing a new household. In addition, in certain pre-Incan communities, there existed a higher rank of people known as *curacas*, who were entitled to make a greater claim on the community's resources. Records indicate that in some instances women served as *curacas*, participating in governing councils that made decisions affecting the community as a whole.
- Scholars have suggested that with the conquest of these communities by Incas, women were relegated to a lesser status. It is true that, as the Incan empire expanded, the state needed to ensure the loyalty of a growing bureaucracy, professional class, and military, and thus it began to award these groups various grants of land. Since the activities that earned grants of land from the state were defined by Incan culture as almost exclusively masculine, the result, scholars argue, should have been a corresponding diminishment of the authority and autonomy of women.
- However, this view of the effect of the Incan conquest on women may not be entirely accurate. Most of the information we have concerning Incan society consists of chronicles written by Spanish clerics and conquistadores, and because of cultural bias predicated on male dominance in their own religious and public life, they may not have considered the activities of Incan women especially important unless they perceived them as analogous to the activities of women in their own culture. Other evidence indicates that, in Incan society, women's tasks could have afforded them considerable status. For instance, one of women's main functions in Incan society was that of weaving cloth. The distribution and exchange of cloth were essential to the empire's economic structure, and more important, designs woven into belts, ponchos, and shawls constituted a form of symbolic communication. Pri-

marily by decoding designs found in modern weavings, designs also found in pre-Columbian Incan material, Gertrude Solari has shown that through these textiles women recorded not only incidents of household life but also the political status of villagers, accounts of critical events, and in some instances even the entire history of a community.

- The primary purpose of the passage is to
  - compare scholarly views of the status of women in pre-Incan Andean communities with scholarly views of the status of women in the Incan empire
  - analyze the implications of recently discovered evidence concerning the role of women in the Incan society
  - question the accuracy of a view of the effects of the Incan conquest on the status of women in the conquered communities
  - question the reliability of descriptions of the Incan society by Spanish clerics and conquistadores
  - present evidence of the significance of women's work in the Incan empire
- It can be inferred from the passage that land distribution in the Incan empire differed from that in pre-Incan Andean communities in that the Incas
  - based the distribution of land on the productivity of individual families.
  - used grants of land to ensure loyalty to the state
  - afforded women more access to community-owned land
  - forbade the *curacas* from owning more than their share of land
  - suspended the requirement that women relinquish their inherited lands when they married
- Which of the following statements concerning the status of women in Incan society can be inferred from the passage?
  - Women were largely excluded from membership in the bureaucratic and professional classes.
  - On marrying, women could acquire land and goods essential to establishing a new household.
  - Women were given equal access to productive resources.
  - In some instances women served as *curacas*.
  - Women had access to little information about political events in their communities.

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4. It can be inferred from the passage that Gertrude Solari assumes which of the following in her discussion of the symbolic designs woven into Incan textiles?
  - (A) The designs have meanings similar to those found in modern weavings.
  - (B) The designs are similar to those found in weavings done by women in other pre-Columbian cultures.
  - (C) The designs were meant to be decipherable only to members of the Incan bureaucracy.
  - (D) The designs provided Spanish clerics and conquistadores with much of their information about Incan culture and society.
  - (E) The women who manufactured the textiles were considered by the Incans to be the official historians of their empire.
5. The author considers some accounts of Incan society by Spanish clerics and conquistadores to be
  - (A) thorough but largely ignored by scholars
  - (B) interesting but not really useful for the purposes of scholarship
  - (C) widely accepted but possibly inaccurate
  - (D) informative but possibly overrated with regard to their historical value
  - (E) generally accurate in spite of their cultural bias
6. The author suggests which of the following in her speculation about the status of women in Incan society?
  - (A) The roles of women in Incan society were in many ways analogous to those traditionally associated with women in Spanish culture.
  - (B) Because the production of cloth was economically important in Incan society, status was granted to women who produced it.
  - (C) Because women often recorded the political status of villagers in the symbolic designs of their textiles, they must have been active participants in the political life of the Incan communities.
  - (D) Access to land in Incan society afforded women greater status than did participation in the production of textiles.
  - (E) Because women in Incan society were concerned with the production of textiles, they had little knowledge of Incan agriculture.
7. According to the scholars cited in the passage, all of the following occurred with the expansion of the Incan empire EXCEPT
  - (A) an increase in the size of the bureaucracy
  - (B) grants of land to members of the professional class
  - (C) a new method of distributing land
  - (D) an increase in the production and distribution of textiles
  - (E) the need to ensure the loyalty of the military
8. The passage suggests that recent scholarship describing the effect on women of the Incan conquest is
  - (A) inaccurate in its interpretation of the impact that new methods of distributing community resources had on women's access to land
  - (B) inaccurate in its interpretation of the significance of women's participation in the political life of pre-Incan Andean communities
  - (C) accurate in its interpretation of the basis on which land in pre-Incan Andean communities was apportioned
  - (D) accurate because it correctly interprets the significance of women's work in Incan society
  - (E) accurate because it is based on the firsthand accounts of Spanish observers
9. The author refers to the work of Gertrude Solari most probably in order to
  - (A) examine the evidence supporting a view that is to be refuted
  - (B) illustrate the failure of recent scholarship to challenge a previously held view
  - (C) provide support for the author's challenge to a particular view
  - (D) provide an alternative view to the one proposed earlier
  - (E) illustrate the bias inherent in arguments opposed to those of the author

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That lunar craters are not distributed evenly over the lunar surface is immediately obvious with even a small telescope. Craters also appear in a wide range of sizes, from only a few meters across to hundreds of kilometers

- (5) in diameter. The maria (the very large plains) are noticeably devoid of large craters. Any explanation of crater formation must clearly take these facts into account.

There are two main theories concerning the origin of the lunar craters: one is that they were formed by the

- (10) impact of meteorites, the other that they are due to some type of volcanic activity. According to the former theory, the large majority of the craters were formed during the early stages of the Moon's development when, as seems possible, the number of meteoritic bodies
- (15) moving in orbits similar to that of the Earth-Moon system was quite large. Since the Moon, unlike the Earth, possesses no atmosphere, such bodies would reach the lunar surface at a higher velocity than they would reach Earth. They also would not be affected
- (20) by frictional burning such as they would undergo when plunging through the terrestrial atmosphere. When a large body strikes the lunar surface, it is not stopped at the moment of impact but penetrates to a depth that depends on its mass, radius, and impact velocity.

- (25) If we are to explain the very large craters on the assumption that several meteorites fell close together (in space, although not necessarily in time), this would imply that such craters should have uneven floors, not only indented to varying degrees by the several impacts
- (30) but strewn with boulders and debris from the breakup of the meteorites themselves. Observation, however, suggests that the floors of large craters are smoother than can be accounted for by this theory unless there is some other mechanism whereby the floor becomes
- (35) appreciably smoother following the impact.

One mechanism that has been suggested is that those meteorites that formed the craters fell on the lunar surface when the Moon was in a semiplastic condition or, if they fell after the lunar crust had solidified, that the impact itself would liquefy the surface rock sufficiently to force it to flow rather like lava. This liquefying of the rock at the moment of impact has also been put forward to explain the presence in some craters of a central mountain peak, since we know, from high-speed photography of drops falling into liquids, that a jet is

- (45) formed in the center of an impact region.

There is, unfortunately, one very serious objection to this idea. When a body the size and shape of a meteorite strikes solid rock it is quite probable that no intermediate liquid phase of the surface rock is ever produced.

10. According to the passage, one hypothesis proposed to explain the smoothness of the floors of large craters argues that the smoothness is a result of the

(A) disintegration of meteorites  
(B) liquefying of surface rock  
(C) numerous impacts of meteorites  
(D) polar concentration of craters  
(E) frictional burning of matter

11. The purpose of the first paragraph is to

(A) summarize the evidence supporting a scientific theory  
(B) explain what is known about a scientific puzzle  
(C) introduce a theory that has been proved correct  
(D) describe phenomena to be explained  
(E) clarify the meaning of an obscure statement

12. The author fails to suggest any explanation for which of the following statements?

(A) There is little evidence of the breakup of meteorites on the floors of lunar craters.  
(B) Large numbers of meteorites struck the lunar surface during the Moon's formation.  
(C) Meteorites are likely to penetrate the lunar surface.  
(D) Some craters contain a central mountain peak.  
(E) The maria are devoid of large craters.

13. Which of the following statements about the meteorite-impact theory is most clearly supported by the information in the passage?

(A) It is more acceptable to scientists than is the volcanism theory.  
(B) It is able to explain some observed features of the Moon's surface.  
(C) It is one of several theories all of which seem equally tenable to scientists.  
(D) Its importance is primarily historical.  
(E) It has been abandoned by most scientists.

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14. The passage states that, in contrast to meteorites that enter the Earth's atmosphere, meteorites striking the Moon are
- (A) likely to be almost entirely burned up
  - (B) likely to fall close together
  - (C) likely to liquefy immediately
  - (D) able to create craters of widely varying diameters
  - (E) able to hit the surface at greater speeds
15. The author suggests that the theory that has been presented to explain the existence of central mountain peaks in some craters is based on
- (A) the author's own observation of the behavior of lunar rock
  - (B) inadequate evaluations of the material structure of the lunar crust
  - (C) inference from an apparently similar situation
  - (D) conjectures with which the author agrees
  - (E) information that has become outdated
16. The author considers an explanation for the formation of very large lunar craters and then evaluates the explanation as
- (A) confirmed by the characteristics of meteorites as they travel through space
  - (B) supported by observations concerning the liquefying of rocks
  - (C) incompatible, without further additions, with evidence of the smoothness of crater floors
  - (D) improbable because of a disparity with the known causes of analogous formations on Earth
  - (E) inconsistent, if unmodified, with the facts about the distribution of the large lunar craters
17. It can be inferred from the passage that unevenness in the floors of craters (line 28) should have resulted from the fact that
- (A) the meteorites that formed the craters had different masses or impact velocities
  - (B) the meteorites that formed the craters were all traveling at the same speed
  - (C) the meteorites that formed the craters all reached the Moon's surface at the same time
  - (D) when the meteorites struck the Moon, its surface was in a semiplastic condition
  - (E) when the meteorites struck the Moon, its surface was already uneven

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Scholars generally agree that the *Maestà*, the high altarpiece painted by Duccio for the Cathedral of Siena, is one of the greatest panel paintings ever produced.

- (5) There is much controversy, however, with regard to when the altarpiece came into being. Some scholars have argued that the painting was commissioned in 1308 and completed by the summer of 1311, but the former date seems improbable for two reasons. First, the argument that the painting was commissioned in 1308 is based on a dubious interpretation of a document. In the fall of 1308, Duccio was compelled to borrow from the Opera del Duomo, which commissioned the *Maestà*, a sizeable sum of fifty florins. The ninety-five florins Duccio was to receive on completion of the narrative scenes on the back of the *Maestà* served as collateral for the loan. Included in this agreement, however, was the stipulation that Duccio play a larger role in the execution of the *Maestà* than had been previously arranged. John White and James Stubblebine both concur with earlier Duccio scholars that the document containing this agreement was the commission for the entire *Maestà*, front and back, but this is unlikely. The one bona fide Duccio commission in existence, for the *Rucellai Madonna* in the Uffizi Gallery, stipulates the form and subject of the painting. That part of the Siena document that concerns the *Maestà* itself mentions only Duccio's role in its execution.

- Second, scholars who argue that the 1308 agreement was the commission for the entire *Maestà* must explain how Duccio managed to complete the altarpiece in less than three years. White suggests that "the actual work of painting a large panel was much more like frescoing a wall than might at first be thought," thus implying that the panel was painted by Duccio as quickly as a fresco would be painted. But this appears a wildly improbable thesis, given the intricate design and complexity of the painting on the main panel. Stubblebine attempts to explain the rapidity of the production of the altarpiece by arguing somewhat more plausibly that while Duccio himself painted the main panel and the predella beneath it, he assigned the design and execution of the back of the altarpiece to six other painters, including Simone Martini and the brothers Lorenzetti, who attained prominence later in the century. Although the painting of large altarpieces was often carried out by the designing master with the help of members of his shop, it is doubtful that in a commission of such solemnity Duccio would have allowed his disciples to undertake such a large portion of the work on their own. True, the narrative scenes on the back show intermittent evidence of studio intervention, but the absolute narrative consistency of the whole cycle of paintings in the altarpiece would be inexplicable if all the panels were not at least designed by Duccio himself and painted under his close supervision.

18. Which of the following titles best summarizes the content of the passage?

- (A) Competing Views of Duccio's Influence on Fourteenth-Century Italian Painting
- (B) New Theories on How the *Maestà* Came into Being
- (C) Duccio's Techniques in Painting the *Maestà*: A Scholarly Dispute
- (D) When Work on the *Maestà* Was Begun: An Unresolved Question
- (E) The *Maestà*: Duccio's Masterpiece?

19. It can be inferred from the passage that Stubblebine would agree with which of the following statements concerning how the *Maestà* came into being?

- I. The *Maestà* was completed in less than three years.
- II. Duccio would have had trouble completing the *Maestà* in less than three years without the assistance of other artists.
- III. The narrative consistency of the *Maestà* can be explained by the fact that Duccio designed the narrative scenes on the back of the *Maestà* himself.

- (A) I only
- (B) II only
- (C) I and II only
- (D) II and III only
- (E) I, II, and III

20. It can be inferred from the passage that the agreement mentioned in line 16 included all of the following EXCEPT

- (A) Duccio's role in the execution of the *Maestà*
- (B) the amount of money that Duccio borrowed from the Opera del Duomo
- (C) the form and subject matter of the *Maestà*
- (D) the collateral for Duccio's loan from the Opera del Duomo
- (E) Duccio's fee for finishing the work on the back of the *Maestà*

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## Practices for GMAT Book 1

21. According to the passage, the author's response to White's explanation of how the *Maestà* was painted is most directly influenced by which of the following?
- (A) The complexity of the painting on the main panel
  - (B) The evidence of studio intervention on the back panels
  - (C) The terms of the commission for the *Rucellai Madonna*
  - (D) The work of Simone Martini and the Lorenzetti brothers
  - (E) The comparison of Duccio's work with that of other artists
22. The passage implies which of the following about frescoes?
- I. They are generally more intricate in design than panel paintings.
  - II. Wall frescoes were generally painted more quickly than panels of comparable size.
  - III. Artists in fourteenth-century Italy preferred them to panel paintings.
- (A) I only
  - (B) II only
  - (C) I and II only
  - (D) II and III only
  - (E) I, II, and III
23. According to the passage, the commission for the *Rucellai Madonna* differs from the document mentioned in lines 25-27 in that the former
- (A) specified the date by which the painting was to be completed
  - (B) specified what the painting was to represent
  - (C) indicated how much Duccio was to be paid when the painting was completed
  - (D) indicated which artists would assist Duccio in completing the painting
  - (E) specified Duccio's role in the execution of the painting
24. According to the passage, the practice by masters of relying on the members of their shops to help complete a work was
- (A) unusual in the case of Duccio
  - (B) put into effect when the commission was a particularly solemn one
  - (C) the only way to explain the narrative consistency of the *Maestà*
  - (D) common when the work was a large altarpiece
  - (E) the cause of a dispute between Duccio and the Opera del Duomo
25. The author assumes which of the following in analyzing White's and Stubblebine's arguments?
- (A) Duccio often carefully supervised the work of his assistants.
  - (B) It was common for Italian artists of the fourteenth century to begin work on a project before it was actually commissioned.
  - (C) The narrative consistency of the *Maestà* can be explained by the short time it took Duccio to complete it.
  - (D) Duccio's work on the *Rucellai Madonna* made it impossible for him to devote full time to the *Maestà*.
  - (E) The *Maestà* must have been completed by the summer of 1311.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 4

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1.  $\frac{5+5+5}{5 \cdot 5 \cdot 5 \cdot 3 \cdot 3} =$

- (A)  $\frac{1}{225}$  (B)  $\frac{1}{75}$  (C)  $\frac{1}{9}$  (D)  $\frac{1}{3}$  (E)  $\frac{3}{5}$

2. Two cities that are geographically 380 miles apart are 2 inches apart on a certain map. If the map is drawn to scale, how many miles apart are two cities that are  $7\frac{1}{2}$  inches apart on the map?

- (A) 665 (B) 1,330 (C) 1,425  
(D) 2,090 (E) 2,850

3.  $\frac{\frac{1}{10}}{1 - \frac{1}{10}} =$

- (A)  $\frac{1}{9}$  (B)  $\frac{9}{10}$  (C) 1 (D)  $\frac{10}{9}$  (E) 9

4. On a new job Alice earned \$198 the first week and \$220 the second week. If she worked 4 more hours the second week than the first week and was paid at the same hourly rate, how much did she earn per hour?

- (A) \$4.00  
(B) \$4.50  
(C) \$5.00  
(D) \$5.50  
(E) \$6.00

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## Practices for GMAT Book 1

Questions 5-7 refer to the following table.

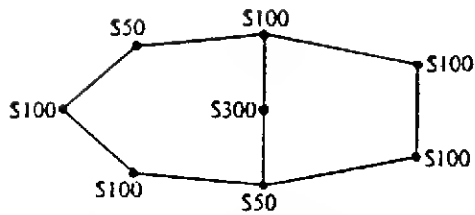
INCOME DISTRIBUTION IN  
COMMUNITY X, 1983

Income Earned	Number of Wage Earners
\$22,000 or more	12
\$20,000 to \$21,999.99	300
\$18,000 to \$19,999.99	812
\$16,000 to \$17,999.99	578
\$14,000 to \$15,999.99	602
\$12,000 to \$13,999.99	900
\$10,000 to \$11,999.99	218
\$9,999.99 or less	80
	Total 3,502

5. How many of the wage earners in Community X earned an income of at least \$18,000?
- (A) 12   (B) 312   (C) 812  
(D) 1,124   (E) 2,690
6. Approximately what percent of the wage earners in Community X earned an income of at least \$16,000 but less than \$20,000?
- (A) 48%  
(B) 40%  
(C) 30%  
(D) 23%  
(E) 17%
7. What was the average (arithmetic mean) income of the wage earners in Community X?
- (A) \$12,000  
(B) \$13,000  
(C) \$15,000  
(D) \$16,000  
(E) It cannot be determined from the information given.

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8. The map above shows the eight locations where an agent must collect the amounts indicated. If the agent wants to start and stop at the same point and not retrace any part of the trip, what is the greatest amount that the agent can collect on one trip?

(A) \$300  
(B) \$650  
(C) \$700  
(D) \$750  
(E) \$900

9. Of those surveyed in a poll, 60 percent were Democrats. If 75 percent of the Democrats polled were males and 55 percent of the non-Democrats polled were males, what percent of those polled were males?

(A) 72%  
(B) 70%  
(C) 68%  
(D) 67%  
(E) 65%

10. If  $\frac{1}{x} = \frac{2}{3}$ , then  $\frac{1}{1+x} =$

(A)  $\frac{2}{3}$  (B)  $\frac{1}{2}$  (C)  $\frac{3}{5}$  (D)  $\frac{5}{3}$  (E)  $\frac{5}{2}$

11. If  $rt > st$  and  $r > s$ , then which of the following must be true?

(A)  $t > 0$   
(B)  $s > 0$   
(C)  $r > 0$   
(D)  $t < 0$   
(E)  $rs > 0$

12. Of the following, which is greatest?

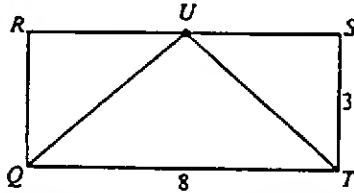
(A) 0.999  
(B)  $(0.999)^2$   
(C)  $(0.999)^3$   
(D)  $\sqrt{0.999}$   
(E)  $\frac{1}{0.999}$

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13. Which of the following gives the cost, in dollars, of  $t$  feet of pipe that costs  $s$  cents per foot?

(A)  $\frac{ts}{100}$  (B)  $\frac{100t}{s}$  (C)  $\frac{100s}{t}$   
 (D)  $\frac{t}{100s}$  (E)  $100ts$



14. In rectangle  $QRST$  above,  $RU = SU$ . What is the ratio of the perimeter of  $\triangle QUT$  to the perimeter of rectangle  $QRST$ ?

(A)  $\frac{3}{8}$  (B)  $\frac{1}{2}$  (C)  $\frac{5}{8}$  (D)  $\frac{3}{4}$  (E)  $\frac{9}{11}$

15. If  $(x - 5)(y + 2) = 0$ , which of the following must be true?

(A)  $x = y$   
 (B)  $x > y$   
 (C)  $x < y$   
 (D)  $xy = -10$   
 (E) None of the above

16. If  $a^5 = 9(25)(45)(75)$ , then  $a =$

(A) 5 (B) 9 (C) 10 (D) 15 (E) 25

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## Practices for GMAT Book 1

17. A certain disability plan pays monthly benefits of 60 percent of the first \$2,000 of monthly salary plus 40 percent of any portion in excess of \$2,000—the total monthly benefit not to exceed \$2,500. What is the smallest monthly salary that will yield the maximum monthly benefit under this plan?
- (A) \$5,750  
(B) \$5,250  
(C) \$4,500  
(D) \$3,250  
(E) \$2,200
18. A cubical tank is filled with water to a level of 2 feet. If the water in the tank occupies 18 cubic feet, to what fraction of its capacity is the tank filled with water?
- (A)  $\frac{1}{9}$  (B)  $\frac{2}{9}$  (C)  $\frac{1}{3}$  (D)  $\frac{1}{2}$  (E)  $\frac{2}{3}$
19. For any number  $x$ ,  $\boxed{x}$  denotes the least non-negative number  $y$  such that  $x + y$  is an integer. What is the value of  $8.4 - \boxed{8.4}$ ?
- (A) -0.4 (B) 0 (C) 0.6 (D) 7.8 (E) 8.0
20. Jeff drove to work from his home, averaging 40 miles per hour, and was 12 minutes late. The next day he left home for work at the same time, took the same route, averaging 48 miles per hour, and was 7 minutes late. How far in miles is it from Jeff's home to his work?
- (A) 20.0 (B) 24.5 (C) 30.0  
(D) 37.5 (E) 40.0

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 6

Time—30 minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise choose one of the others. Select the best version and blacken the corresponding space on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English: that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence: this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. Unlike earlier satellites that last a year or two before failing, the life span of the new orbiting observatories is expected to be ten to twenty years.
  - (A) the life span of the new orbiting observatories is expected to be
  - (B) the life span of the new orbiting observatories, it is expected, will be
  - (C) it is expected that the life span of the new orbiting observatories would be
  - (D) the expectation is for the new orbiting observatories to have a life span of
  - (E) the new orbiting observatories are expected to have a life span of
2. Tecumseh urged all Native American tribes, even former enemies, to resist the cession of individual parcels of land by forming an intertribal confederacy and under it there will be common ownership of all tribal lands.
  - (A) all Native American tribes, even former enemies, to resist the cession of individual parcels of land by forming an intertribal confederacy and under it there will be
  - (B) that all Native American tribes, and even former enemies, resist the cession of individual parcels of land by forming an intertribal confederacy, and under it there would be
  - (C) that all Native American tribes, even former enemies, should be resistant to the cession of individual parcels of land by forming an intertribal confederacy and under it they would have
  - (D) all Native American tribes, even former enemies, to resist the cession of individual parcels of land by forming an intertribal confederacy under which there would be
  - (E) all Native American tribes, and even former enemies, that they were to resist the cession of individual parcels of land, form an intertribal confederacy, and under it they would have
3. Black pepper is the dried fruit of the *Piper nigrum*, a woody vine that grows only in tropical regions with about one hundred inches of rainfall a year, on the average, alternating with long periods of dry heat.
  - (A) with about one hundred inches of rainfall a year, on the average, alternating with
  - (B) where rainfall, averaging about one hundred inches a year, alternates with
  - (C) with, alternately, about one hundred inches of average annual rainfall and
  - (D) averaging about one hundred inches of rainfall annually, alternating between
  - (E) averaging annually about one hundred inches of rainfall alternately with
4. A growing number of the decisions made at federal, state, and local levels involves technical judgments that much of the electorate is unable knowledgeably to challenge.
  - (A) involves technical judgments that much of the electorate is unable knowledgeably to challenge
  - (B) involves technical judgments unable to be challenged knowledgeably by much of the electorate
  - (C) involves technical judgments that cannot be challenged knowledgeably by much of the electorate
  - (D) involve technical judgments that much of the electorate cannot knowledgeably challenge
  - (E) involve technical judgments incapable of being knowledgeably challenged by much of the electorate

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5. Searching for tangible evidence of the Roman past in ancient Jerusalem, Israeli archaeologists have excavated the main Roman entryway into the Old City and succeeded in unearthing a guard tower, the tallest preserved Roman structure in the country.
  - (A) Israeli archaeologists have excavated the main Roman entryway into the Old City and succeeded in unearthing a guard tower.
  - (B) the main Roman entryway into the Old City was excavated by Israeli archaeologists, who succeeded in unearthing a guard tower.
  - (C) the guard tower successfully unearthed by Israeli archaeologists excavating the main Roman entryway into the Old City is
  - (D) the Israeli archaeologists' excavation of the main Roman entryway into the Old City has succeeded in unearthing a guard tower that is
  - (E) success was achieved by Israeli archaeologists in unearthing a guard tower as they were excavating the main Roman entryway to the Old City.
6. The writer Alice Walker regards Stevie Wonder to be a spiritual singer rather than a pop singer, and so she opened *The Color Purple* with a quotation from his song "Do Like You."
  - (A) regards Stevie Wonder to be a spiritual singer rather than
  - (B) regards Stevie Wonder as being a spiritual singer instead of
  - (C) considers Stevie Wonder a spiritual singer rather than
  - (D) considers Stevie Wonder to be a spiritual singer instead of
  - (E) considers Stevie Wonder as being a spiritual singer rather than
7. Alcohol is the only drug that is soluble in both fat and water; as such it can enter all parts of the human body, affecting virtually every cell and biological pathway.
  - (A) water; as such it can enter all parts of the human body, affecting
  - (B) water; as such entering all parts of the human body, and affecting
  - (C) water, as such entering all parts of the human body, which affects
  - (D) water, and as such entering all parts of the human body to affect
  - (E) water, which can enter all parts of the human body to affect
8. After three months of investigation, it became apparent that both local and state taxes have not and probably will not be paid by the insolvent corporation.
  - (A) and probably will not be paid
  - (B) been and probably will not be paid
  - (C) been paid and probably will not be
  - (D) been paid nor probably will be
  - (E) and will not be paid, probably,
9. A publication may be sued for libel in any state where it regularly circulates under a unanimous ruling by the Supreme Court.
  - (A) A publication may be sued for libel in any state where it regularly circulates under a unanimous ruling by the Supreme Court.
  - (B) A publication may be sued for libel in any state where it has regular circulation under a unanimous ruling by the Supreme Court.
  - (C) Under a unanimous ruling by the Supreme Court, a publication may be sued for libel in any state in which it regularly circulates.
  - (D) Under a unanimous ruling by the Supreme Court, a publication may be sued for libel in any state in which there is regular circulation.
  - (E) Under a unanimous ruling by the Supreme Court, there may be a suit for libel in any state in which a publication regularly circulates.
10. City planners in Detroit hope that the renewal project extending along the eastern riverfront will establish a population that lives and works downtown and also provides the office space needed to attract new businesses.
  - (A) that lives and works downtown and also provides
  - (B) to live and work downtown and also provide
  - (C) that lives as well as works downtown and also provide
  - (D) which lives as well as works downtown and also provides
  - (E) who live as well as work downtown and also provides

GO ON TO THE NEXT PAGE.

11. The broad appeal of detective stories lies in the repetition of a familiar formula; the variations of skillful characterization and clever plot construction serve not so much to change the formula, but rather render it more appealing to even the most demanding reader.
  - (A) so much to change the formula, but rather
  - (B) as much to change the formula as
  - (C) so much to change the formula, as rather to
  - (D) so much to change the formula as to
  - (E) as much to change the formula, but to
12. Someday computers may be able to "see" forms, just as they now can be made to recognize voices, a problem of perception that is similar to artificial vision, but the solution has proved easier.
  - (A) that is similar to artificial vision, but the solution has proved easier
  - (B) that is similar to artificial vision but one that has proved easier to solve
  - (C) similar to that of artificial vision but it has proved easier to solve
  - (D) similar to that of artificial vision, but the solution has proved easier
  - (E) similar to that of artificial vision but one that has proved easier to solve
13. A federal study of farm debt finds that one-third of all family-run commercial farms will face financial difficulty in the next year; over ten percent of these farms are either insolvent or on the verge of it.
  - (A) year, over ten percent of these farms are either insolvent or on the verge of it
  - (B) year, over ten percent of these farms are either insolvent or on the verge of insolvency
  - (C) year, over ten percent of them either are insolvent or they verge on being so
  - (D) year, over ten percent of them either being insolvent or on the verge of insolvency
  - (E) year, over ten percent of them being either insolvent or verging on it
14. Although about 99 percent of the more than 50 million Turks are Muslims, the republic founded by Mustafa Kemal Atatürk in 1923 is resolutely secular.
  - (A) Although about 99 percent of the more than 50 million
  - (B) Although about 99 percent of over 50 million of the
  - (C) Although about 99 percent of more than 50 million
  - (D) Despite the fact that about 99 percent of more than 50 million
  - (E) Despite the fact that about 99 percent of over 50 million
15. According to some psychologists, the attention that has been paid in recent years to misplaced guilt and guilt taken to neurotic extremes has tended to overshadow its importance as a positive socializing force.
  - (A) misplaced guilt and guilt taken to neurotic extremes has tended to overshadow
  - (B) misplaced guilt and guilt taken to neurotic extremes has a tendency to overshadow
  - (C) misplaced guilt and guilt taken to neurotic extremes has a tendency of overshadowing
  - (D) guilt that is misplaced or taken to neurotic extremes has tended to overshadow
  - (E) guilt that is misplaced or taken to neurotic extremes has a tendency of overshadowing
16. Evidence that a giant meteorite collided with the Earth some 65 million years ago, blamed for the extinction of the dinosaurs, has been inferred from the discovery of a thin layer of crustal deposits rich in iridium.
  - (A) Evidence that a giant meteorite collided with the Earth some 65 million years ago, blamed for the extinction of the dinosaurs,
  - (B) The collision of a giant meteorite with the Earth some 65 million years ago, an event blamed for the extinction of the dinosaurs,
  - (C) The extinction of the dinosaurs has been blamed on evidence that a giant meteorite collided with the Earth some 65 million years ago, an event that
  - (D) A giant meteorite, whose collision with the Earth some 65 million years ago is blamed for the extinction of the dinosaurs,
  - (E) That there was a collision of a giant meteorite with the Earth some 65 million years ago, blamed for the extinction of the dinosaurs,
17. Cockayne's syndrome is a rare and incurable hereditary disorder that, like progeria and Werner's syndrome, is believed to accelerate and caricature the aging process.
  - (A) like progeria and Werner's syndrome
  - (B) as progeria and Werner's syndrome do
  - (C) like the case of progeria and Werner's syndrome
  - (D) as progeria and Werner's syndrome are
  - (E) such as is the case with progeria and Werner's syndrome

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18. The food industry claims that artificial sweeteners used in combination enhance one another's sweetness and that the availability of a variety of sweeteners makes less likely individual consumers who will exceed the acceptable daily intake for any single sweetener.
- (A) that the availability of a variety of sweeteners makes less likely individual consumers who will exceed
  - (B) that with a variety of sweeteners available individual consumers will less likely exceed
  - (C) that the availability of a variety of sweeteners makes it less likely that individual consumers will exceed
  - (D) the availability of various sweeteners make less likely individual consumers exceeding
  - (E) it is less likely with various sweeteners available for individual consumers to exceed
19. The African ivory trade was substantial and long-lasting, having begun at least as early as the second millennium B.C., in which ivory from Nubia was first exported to Egypt.
- (A) long-lasting, having begun at least as early as the second millennium B.C., in which
  - (B) long-lasting; its earliest beginnings were at least the second millennium B.C., when
  - (C) long-lasting; it had a beginning that was at least the second millennium B.C., in which
  - (D) long-lasting, beginning at least as early as the second millennium B.C., when
  - (E) lasting a long time, beginning at least as early as the second millennium B.C., in which
20. While marriage rates have fallen sharply in the last decade, they are now approaching that in the first four decades of this century.
- (A) While marriage rates have fallen sharply in the last decade, they are now approaching that in
  - (B) Because marriage rates have fallen sharply in the last decade, it is now approaching those in
  - (C) In that marriage rates have fallen sharply in the last decade, it is now approaching those of
  - (D) Marriage rates have fallen sharply in the last decade, to the extent that they are now approaching that in
  - (E) Marriage rates have fallen sharply in the last decade, so much so that they are now approaching those of
21. Many economists maintain that it is price levels for services, rather than supply and demand, that most clearly reflect consumer attitudes toward inflation.
- (A) it is price levels for services, rather than supply and demand, that most clearly reflect consumer attitudes toward inflation
  - (B) price levels for services, rather than supply and demand, most clearly reflects consumer attitudes toward inflation
  - (C) rather than supply and demand, consumer attitudes toward inflation are most clearly reflected by price levels for services
  - (D) price levels for services most clearly reflect consumer attitudes toward inflation, rather than supply and demand
  - (E) the clearest reflection of consumer attitudes toward inflation are price levels for services rather than supply and demand
22. The British abandoned the obligations of the Balfour Declaration by carving Transjordan out of the mandate territory, and it was ceded by them to one of the sons of the sheik of Mecca, who had been a British wartime ally.
- (A) territory, and it was ceded by them
  - (B) territory, to have ceded it
  - (C) territory and ceding it
  - (D) territory and had ceded it
  - (E) territory and ceded it
23. After five years of military service, graduates of the United States service academies must decide to continue their career as an officer or leave the military.
- (A) to continue their career as an officer
  - (B) whether to continue their careers as officers
  - (C) either that they should continue their career as an officer
  - (D) if they should continue their career as an officer
  - (E) should they continue their careers as officers

GO ON TO THE NEXT PAGE.

24. One analyst of the liquor industry estimated that this year a few liquor stores have experienced declining sales of up to fifty percent but predicted that the industry as a whole will maintain a volume of sales fairly close to last year.
- (A) declining sales of up to fifty percent but predicted that the industry as a whole will maintain a volume of sales fairly close to last year
  - (B) declines in sales of up to fifty percent but predicted that the industry as a whole would have maintained a volume of sales fairly close to last year
  - (C) up to fifty percent in declining sales but predicted that the industry as a whole would maintain a volume of sales fairly close to last year's
  - (D) sales declines of up to fifty percent but predicted that the industry as a whole would maintain a volume of sales fairly close to last year's
  - (E) declines up to fifty percent of sales but predicted that the industry as a whole will have maintained a volume of sales fairly close to last year's
25. A natural ingredient in many foods, small amounts of sodium are as essential to the body as air and water are.
- (A) A natural ingredient in many foods, small amounts of sodium are as essential to the body as air and water are.
  - (B) As a natural ingredient in many foods, small amounts of sodium are as essential to the body as air and water.
  - (C) As a natural ingredient in many foods, sodium is as essential to the body in small amounts as is air and water.
  - (D) A natural ingredient in many foods, in small amounts, sodium is as essential to the body as is air and water.
  - (E) A natural ingredient in many foods, sodium, in small amounts, is as essential to the body as air and water are.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



## Practices for GMAT Book 1

### SECTION 7

Time—30 minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to blacken space

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

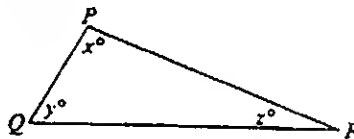
You may assume that the position of points, angles, regions, etc., exist in the order shown.

All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

- (1)  $PQ = PR$
- (2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

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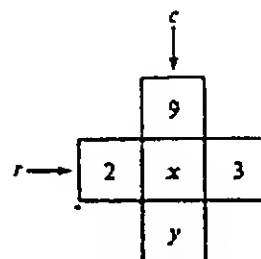
## Practices for GMAT Book 1

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- E Statements (1) and (2) TOGETHER are NOT sufficient.

1. What is the value of the integer  $x$ ?
  - (1)  $x$  is divisible by 7.
  - (2)  $x + 2 = 16$
2. Exclusive of tax, was the total revenue from the sale of book  $X$  last week greater than \$100?
  - (1) Last week more than 9 copies of book  $X$  were sold.
  - (2) Last week the revenue from the sale of each copy of book  $X$  was \$10.50 plus tax.
3. What was the average (arithmetic mean) of the scores on quiz  $Q$  for 35 students?
  - (1) The lowest score on quiz  $Q$  was 22 and the highest score was 98.
  - (2) The sum of the 35 students' scores on quiz  $Q$  was 2,730.
4. If a satellite travels in a circular orbit at a constant rate, how far does it travel in 3 minutes?
  - (1) The radius of its orbit is 4,100 miles.
  - (2) The duration of one complete orbit is 96 minutes.
5. If  $xy \neq 0$ , then  $x$  is what fraction of  $y$ ?
  - (1)  $y$  is  $\frac{3}{4}$  of  $x$ .
  - (2)  $x$  is  $\frac{3}{4}$  of 16.
6. If the temperature at a weather station was  $50^{\circ}\text{F}$  at 6 a.m. and  $70^{\circ}\text{F}$  at 6 p.m. on a certain day, what was the temperature at the station at 12 noon that day?
  - (1) The temperature at the station that day rose  $22^{\circ}\text{F}$  from 8 a.m. to 12 noon.
  - (2) The temperature at the station that day fell  $10^{\circ}\text{F}$  from 2 p.m. to 6 p.m.
7. Sam's Grocery Store sells potatoes only in 5-pound bags and 10-pound bags. Yesterday, if the store sold 130 pounds of potatoes, how many 5-pound bags were sold?
  - (1) The number of 5-pound bags sold was 2 more than 4 times the number of 10-pound bags sold.
  - (2) The store sold 50 more pounds of potatoes in 5-pound bags than in 10-pound bags.

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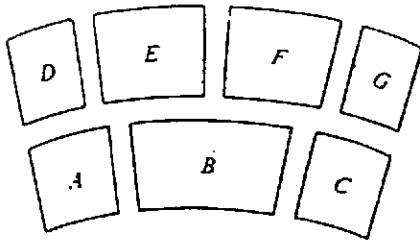
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8. At Garcia's Market, a certain brand of cocoa is sold in boxes of two sizes,  $A$  and  $B$ . For which size is the price per ounce of cocoa less?
- (1) The weight of the cocoa in the size  $B$  box is  $1\frac{2}{3}$  times that in the size  $A$  box.  
 (2) The price of a size  $B$  box is 80 percent more than the price of a size  $A$  box.
9. In Country  $X$  each taxpayer files, either individually or jointly, one federal tax return per year. Did more than 10 million of the taxpayers who filed a federal tax return for 1984 report having individual retirement accounts?
- (1) Of the 90 million federal tax returns filed for 1984 in Country  $X$ ,  $\frac{1}{3}$  were joint returns filed by two taxpayers; all other returns were filed by individual taxpayers.  
 (2) Of the Country  $X$  taxpayers who filed federal tax returns in 1984, exactly 10.5 percent reported having individual retirement accounts.
10. What is the value of  $[xy - z(x - 2y)]$ ?
- (1)  $x = 2y$   
 (2)  $z = 0$
11. If  $a$  and  $b$  are positive numbers, is  $a > b$ ?
- (1)  $a > 3b$   
 (2)  $a > \frac{b}{3}$
12. In the figure above, if the product of the numbers in row  $r$  is equal to the sum of the numbers in column  $c$ , what is the value of  $x$ ?
- (1)  $x + y = 15$   
 (2)  $9 + y = 20$



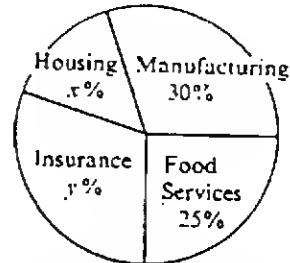
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13. A certain auditorium has seven seating sections arranged as shown in the figure above. The numbers of seats in sections *A* and *C* are equal, the numbers in *D* and *G* are equal, and the numbers in *E* and *F* are equal. What fraction of all the seats in the auditorium are in sections *B*, *E*, and *F* combined?
- (1) The number of seats in section *B* is equal to the number of seats in sections *A* and *C* combined.
  - (2) The number of seats in section *E* is 1.5 times the number of seats in section *D*.



14. If the graph above shows the distribution of revenues for Company *X* last year, what were Company *X*'s total revenues last year?
- (1) Last year revenues in the housing category were exactly half of revenues in the manufacturing category.
  - (2) Last year revenues in the food services category totaled \$926 million.

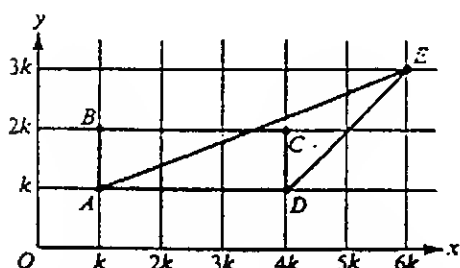
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15. If  $X$  and  $Y$  are two empty rectangular boxes, each with a removable top, will box  $X$  fit completely inside box  $Y$ ?

- (1) The capacity of  $Y$  is greater than the capacity of  $X$ .
- (2) The surface area of the bottom of  $Y$  is greater than the surface area of the bottom of  $X$ .



16. In the rectangular coordinate system above, what is the area of triangular region  $AED$ ?

- (1) The area of region  $ABCD$  is 12.
- (2)  $AD = 6$

17. Is  $\frac{x}{y} > 0$ ?

- (1)  $x^2 = 4$
- (2)  $y^3 = -27$

18. What is the value of the positive integer  $x$ ?

- (1)  $x^3$  is an even integer between 10 and 100.
- (2)  $x^2 < 30$

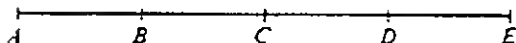
19. What is the value of  $j$ ?

- (1)  $j - k + 2 = 0$
- (2)  $j = -j$

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20. In the figure above, do segments  $AB$  and  $DE$  have equal length?

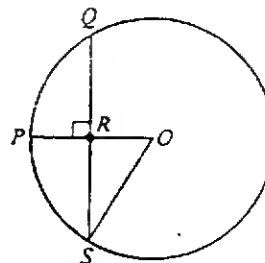
- (1) Segments  $AC$  and  $BD$  have equal length.  
 (2) Segments  $BD$  and  $CE$  have equal length.

21. A trustee invested a total of \$100,000, more than half of which was invested at 6 percent simple annual interest and the rest of which was invested at 8 percent simple annual interest. What amount was invested at 8 percent?

- (1) The total annual income on the investment was \$6,800.  
 (2) If twice as much had been invested at 8 percent and the rest at 6 percent, the total annual income on the investment would have been increased by \$800.

22. If  $S$  is a set of integers and 5 is in  $S$ , is every multiple of 5 in  $S$ ?

- (1) If  $x$  is in  $S$ , then  $x + 5$  is in  $S$ .  
 (2) If  $x$  is in  $S$ , then  $x - 5$  is in  $S$ .



23. In the figure above,  $O$  is the center of the circle. If  $OP$  and  $QS$  are perpendicular and bisect each other, what is the length of  $OS$ ?

- (1) The length of  $PR$  is  $\sqrt{3}$ .  
 (2) The length of  $QS$  is 6.

24. If  $n$  is an integer and  $10 < 3^n < 300$ , what is the value of  $n$ ?

- (1)  $n$  is the square of an integer.  
 (2)  $3^n$  is the square of an integer.

25. Cars  $P$  and  $Q$  started simultaneously from opposite ends of a straight 300-mile expressway and traveled toward each other, without stopping, until they passed at location  $X$ . To the nearest mile, how many miles of the expressway had car  $P$  traveled when the two cars passed each other?

- (1) Up to location  $X$ , the average speed of car  $Q$  was 15 miles per hour faster than that of car  $P$ .  
 (2) Up to location  $X$ , the average speed of car  $Q$  was  $1\frac{1}{3}$  times that of car  $P$ .

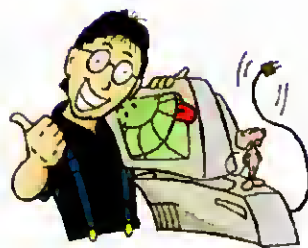
## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
 DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Practices for GMAT

## Book 1

# Test 3



SECTION 1

Time—30 minutes

25 Questions

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and fill in the corresponding oval on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

A primary ingredient of Shaw's book on the American Revolution is the notion of an adolescent rite of passage, the ritual that in various societies brings about the transition of a person from adolescence to adulthood. Shaw interprets certain crowd actions that occurred prior to the American Revolution, such as the burning of effigies of government officials, as adolescent rites of passage. He argues that the Revolution could not have succeeded without these ceremonies. The effigies destroyed were surrogates not merely of the persons represented but of the king, the father who had to be overthrown by the children who were coming of age. The Revolution itself was an adolescent rite of passage, a youth movement: not only did the adults who participated in the ritual protests adopt "the spirit of youth initiation," but they were actually joined by children. The colonists could not "kill" the king until they had prepared themselves by ritually killing other father figures in effigy. The ritual, by enabling the colonists to direct their collective dissatisfaction at a single target, emboldened them and thus helped to prepare them for the final rite of passage.

What makes this very questionable diagnosis appealing is that it seems to answer problems raised by three very different interpretations of the American Revolution. Gipson has painted so rosy a picture of the empire that it is difficult to see why the colonists should have rebelled. He suggests that the colonists responded to the king's treatment of them as a spoiled child would respond to a caring parent. Shaw's work provides the missing piece.

Bailyn has traced the impact on the colonists of the suspicion that there was a conspiracy among English government officials to deprive the colonists of their liberties. He argues that many people of Massachusetts believed that Thomas Hutchinson was at the center of such a conspiracy. Since Hutchinson had done little to deserve the suspicion that fell upon him, the colonists who attacked him appear in Bailyn's work as inexplicably paranoid. Now we have another explanation for this puzzling phenomenon: they were undergoing a preliminary rite of passage, using Hutchinson as surrogate father in order to prepare for the overthrow of the king, the act that would bring them to the political adulthood for which they yearned.

Shaw's interpretation also provides an explanation for the crowd actions that have fascinated Marxist historians. These historians have been trying to endow the crowds that were a conspicuous feature of the early

stages of the Revolution and that participated in the effigy burning with motives distinct from those espoused by the upper-class leaders of the Revolution. None of their attempts has succeeded. Shaw's interpretation, however, gives new dimensions to the actions of the crowds. It discovers "extrapolitical" motives, albeit unconscious ones, for their rebellion.

1. It can be inferred from the passage that the author would find Shaw's interpretation of the American Revolution less appealing if which of the following were commonly regarded by historians as an accurate view of historical events?
  - I. Very few children participated in the various crowd actions that took place prior to and during the American Revolution.
  - II. The king of England was very unfair in his treatment of the American colonists.
  - III. The people of Massachusetts who attacked Thomas Hutchinson had good reason to believe that he had attempted to deprive them of liberties to which they were entitled.
- (A) I only  
(B) II only  
(C) III only  
(D) I and II only  
(E) II and III only
2. The passage suggests that Shaw would be most likely to agree with which of the following statements regarding the behavior of crowds?
  - (A) In order to interpret the behavior of crowds, historians should seek out the motives that individual members of the crowds give for their actions.
  - (B) Interpretations of motives governing individual behavior can be used to illuminate the behavior of crowds.
  - (C) The behavior of crowds can almost always be understood in terms of adolescent rites of passage.
  - (D) The behavior of crowds is almost always determined by the motives espoused by their leaders.
  - (E) Historians' theories about the behavior of crowds will almost always founder on the facts.

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3. Which of the following best describes the author's attitude toward Shaw's interpretation of the American Revolution?
  - (A) He is enthusiastic about it, but feels that it is much too controversial to gain wide acceptance.
  - (B) He admires its novelty, but finds little else to recommend it.
  - (C) He is skeptical about it; yet he finds it attractive.
  - (D) He regards it as reasonable; yet he believes that more information about Revolutionary crowds is needed before it can be accepted.
  - (E) He is dubious about its compatibility with other interpretations of the Revolution.
4. According to Bailyn, Thomas Hutchinson was attacked by some of the colonists because
  - (A) he attempted to deny the people of Massachusetts liberties to which they were entitled
  - (B) he opposed the burning of effigies of government officials
  - (C) the colonists who yearned for political adulthood viewed him as a surrogate father
  - (D) some of the colonists believed that he was involved in a conspiracy to deprive them of their rights
  - (E) many colonists viewed him as a leader of the upper class
5. According to the author of the passage, Shaw's interpretation of the American Revolution implies that the crowds that participated in the burning of effigies of government officials would probably be unable to
  - (A) overthrow the king in reality as opposed to just burning his effigies
  - (B) explain fully the motivation behind their participation in the effigy-burning rituals
  - (C) view their participation in the rituals as a political act
  - (D) resist the temptation to believe that the king approved of their actions
  - (E) accept the reasons given by upper-class leaders of the Revolution for the rebellion against the king
6. According to Shaw, the burning of effigies of government officials was essential to the success of the American Revolution because it
  - (A) stirred up resentment among colonists who had previously been loyal to the king
  - (B) persuaded the colonists that the colonial government was corrupt and vulnerable
  - (C) caused a great deal of fear among the government officials who represented the king in America
  - (D) demonstrated to the colonists the essential role played by ritual in any uprising
  - (E) provided the colonists with an initial focus for their dissatisfaction with the king
7. The passage suggests that Gipson would describe the rebellion of the colonists as
  - (A) paranoid and cruel behavior
  - (B) considerate though cautious behavior
  - (C) childish and ungrateful behavior
  - (D) reasonable in light of the circumstances
  - (E) inconsistent with their stated beliefs about the king
8. The author of the passage is primarily concerned with
  - (A) presenting a view and demonstrating how it solves certain problems
  - (B) reviewing a book and delineating its shortcomings
  - (C) defending a thesis that has been the subject of much controversy
  - (D) arguing that a certain novel thesis casts doubt on three more popular views
  - (E) advocating a new approach to the interpretation of historical events

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World wheat production has increased dramatically during the past three decades. It will, however, have to be raised still higher for the world's growing population to be fed. Since new arable croplands are not likely to become available on a large enough scale to do the job, and since the application of such energy-intensive agricultural aids as fertilizers, pesticides, and herbicides is becoming prohibitively expensive, the next big increment in production will have to be achieved mainly by further improvements in the productivity of wheat itself. Accordingly, there is an urgent need for the development of new varieties of wheat with a greater yield.

Two factors limit this effort. The first is that the genetic material of the cultivated wheats has already been exploited for breeding purposes almost to its full capacity. The second is that the range of genetic variation of the cultivated wheats has decreased drastically over the past two centuries. The erosion of the gene pool of cultivated wheat not only reduces the possibility of further improvements in productivity, but also makes the world wheat crop increasingly vulnerable to new diseases and to adverse climatic changes.

The introduction of modern, scientifically planned breeding practices has substantially diminished the genetic variability of the cultivated wheats. For several decades new, more productive varieties of wheat have been selected at the expense of the overall genetic variability of the world wheat crop. Attempts to increase the variability of the new cultivated wheats by inducing mutations, either by ionizing radiation such as x-rays or by chemical treatment, have met with little success.

The wild relatives of cultivated wheat, however, contain a large reservoir of genes. The adaptation of the various wild wheats to very different environments indicates great genetic variability. The wild wheats are found in a wide range of climatic regions often inhospitable to cultivated wheat: from cool, humid mountains to hot, dry valleys; from areas with an annual rainfall of 1,000 millimeters or more to arid regions with as little as 100 millimeters. Wild wheats also grow in many different types of soils, even in salty ones.

The restoration and enrichment of the gene pool of the cultivated wheats can be accomplished by tapping the vast genetic resources found in the wild relatives of the wheats. Scientists have only just begun to examine these wild genetic resources for agronomically useful characteristics, and the full extent of the genetic treasure trove is still unknown. From the information gathered so far, it is clear that the wild relatives of the cultivated wheats carry many genes of great economic potential.

9. The author of the passage is primarily concerned with
  - (A) refuting a widely held thesis
  - (B) analyzing a set of previously unanalyzed data
  - (C) reconciling a set of opposing views
  - (D) describing a potential solution to a problem
  - (E) establishing a new theory
10. It can be inferred from the passage that the breeding practices that are responsible for the diminished genetic variability of the cultivated wheats are also responsible for which of the following?
  - (A) The decreased vulnerability of the cultivated wheats to new diseases
  - (B) The decline in the number of acres planted in wheat over the past two centuries
  - (C) The increased productivity of the cultivated wheats
  - (D) The increased genetic variability of the wild wheats
  - (E) The continuing high demand for wheat products
11. The author's claim that world wheat production will have to increase in order to feed the world's growing population suggests that she believes which of the following?
  - (A) The growth rate of the world's population will increase steadily over the next three decades.
  - (B) The world's population will double in size by the year 2000.
  - (C) Nonwheat foodstuffs will be unable to meet the demands of the world's growing population.
  - (D) Most of the world's arable croplands are already in production.
  - (E) Per capita consumption of wheat products will grow steadily over the next three decades.

GO ON TO THE NEXT PAGE.

12. The author mentions the limited availability of new arable cropland and the high cost of energy-intensive agricultural aids (lines 4-8) in order to make which of the following points?
- (A) Further growth in wheat production will have to be achieved through the development of varieties of wheat that have greater yields.
  - (B) The high productivity of the cultivated wheats has been achieved at the cost of depleting the world's energy resources.
  - (C) World wheat production will begin to decline unless new breeding practices are developed.
  - (D) World wheat production can increase only if fertilizers, pesticides, and herbicides become less expensive.
  - (E) Wheat productivity can be increased only by developing varieties of wheat that can grow in arid regions.
13. According to the passage, the erosion of the gene pool of the cultivated wheats has resulted in which of the following?
- I. The world wheat crop is becoming increasingly vulnerable to disease.
  - II. The cultivated wheats are becoming less responsive to applications of fertilizers.
  - III. The world wheat crop is becoming less susceptible to adverse climatic changes.
- (A) I only
  - (B) II only
  - (C) III only
  - (D) I and II only
  - (E) I and III only
14. The passage implies which of the following about the genetic variability of the cultivated wheats?
- (A) It has been diminished by frequent applications of herbicides and pesticides.
  - (B) It is roughly equal to that of the wild wheats.
  - (C) It will continue to decline over the next three decades.
  - (D) It was far greater two hundred years ago than it is today.
  - (E) It was increasing before the introduction of modern scientific breeding practices.
15. Which of the following does the author mention as evidence for the impressive genetic variability of the wild wheats?
- (A) The fact that there are more varieties of wild wheat than of cultivated wheat
  - (B) The invulnerability of the wild wheats to diseases that often damage cultivated wheats
  - (C) The ability of the wild wheats to thrive without the help of energy-intensive agricultural aids
  - (D) The fact that modern, scientific breeding practices have not been applied to the wild wheats
  - (E) The wide range of different environments to which the various wild wheats have been able to adapt
16. The idea that the gene pool of the cultivated wheats can be replenished is regarded by the author with
- (A) absolute skepticism
  - (B) mild derision
  - (C) marked indifference
  - (D) cautious optimism
  - (E) complete confidence
17. Which of the following best expresses the main idea of the passage?
- (A) The use of fertilizers and pesticides will have to be curtailed due to the high costs involved.
  - (B) Further increases in wheat productivity may be achieved by tapping the genetic resources of the wild wheats.
  - (C) Scientists must more carefully screen the genetic resources of wild wheat for agronomically useful characteristics.
  - (D) Wild wheats are capable of growing in places normally inhospitable to cultivated wheats.
  - (E) The genetic variability of the cultivated wheats has decreased significantly during the last two centuries.

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Line  
(5) Selectivity, in Willa Cather's opinion, is the principle  
(10) most crucial to the novelist's craft. On every level, from  
choice of subject to choice of form to choice of indi-  
vidual word, selections, she argued, must constantly be  
made. Cather thus could not agree with Walt Whitman  
that all subjects, from the ocean's imperious waves to  
flyspecks on the wall, were of equal worth. She felt that  
Whitman wrote "reckless rhapsodies" whose veneration  
for all things, sublime and ridiculous, although very  
nearly convincing, in the end simply proved his weakness  
as a poet and showed that he had "no literary ethics at  
all beyond those of nature." Lacking finer discrimina-  
tions, she felt, he enjoyed everything with boyish enthu-  
siasm—and never quite grew up.

(15) Cather's own experiences made her acutely aware of  
the distinction between the person trained to write  
equally well on all subjects, the journalist, and the  
creative novelist who works best only with subjects of  
deep personal involvement. Having entered journalism  
(20) to learn the skills necessary for her desired career as a  
writer, she later branded journalism "the vandalism of  
literature." The newspaper in particular lowered art to  
the level of a trade; devouring intellect and talent, it  
returned only gossip. Journalism, she declaimed in a  
(25) bitter moment, "is written by machines, set by machines,  
and read by machines. No one can write long for any  
journal in this country without for the most part losing  
that precious thing called style. Newspapers have no  
style and want none. A newspaper writer should have no  
(30) more individuality than those clicking iron machines  
that throw the type together." Cather believed too that  
the artist must resist writing without first reflecting. Only  
those subjects above the hubbub of life and that persist  
in demanding expression may be heeded; by this reti-  
(35) tence the true, the genuine, and the significant would  
prevail.

Cather suggests some of these views in her essay "The  
Novel Demeublé" (the unfurnished novel), which calls  
for a novel stripped of excess events and language. In  
(40) this essay Cather argued that the value of description is  
"in inverse relation" to its length, and that the presenta-  
tion of information must not be the major aim of fiction.  
Writers, she feared, were led astray by a false analogy  
with landscape painters, who filled every inch of canvas  
(45) with detail. Such a method was self-defeating in fiction.  
Cather felt, for the eye could take in an entire canvas at  
a single glance, but the printed page must be read partic-  
ular by particular, and excess detail "is likely to overtax  
the memory and blur the ultimate clearness of the  
(50) picture." For this reason "a few masterly strokes suffice,"  
and the writer's ability is measured by what is felt to be  
on the page without its actually being there.

18. The author's main purpose in the passage is to
  - (A) argue for a new estimation of Cather's contri-  
bution to literature
  - (B) present to the reader some of the differences  
between journalism and literature
  - (C) summarize Cather's essay "The Novel  
Demeublé"
  - (D) urge writers to follow Cather's example in  
writing novels
  - (E) outline some of Cather's ideas about the art of  
the novel
19. According to the passage, Cather criticized Walt  
Whitman for what she felt was his lack of
  - (A) imagination
  - (B) maturity
  - (C) morality
  - (D) ambition
  - (E) humility
20. It can be inferred from the passage that Cather  
would regard which of the following as most essen-  
tial for a creative novelist?
  - (A) Economic security
  - (B) Controversial beliefs
  - (C) Knowledge of other writers
  - (D) Isolation from current events
  - (E) Personal involvement with a subject
21. The quotation from Cather in lines 25-31 is best  
described as an example of
  - (A) humor
  - (B) understatement
  - (C) caustic exaggeration
  - (D) heightened selectivity
  - (E) sensitive perception

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22. The author suggests that Cather thought that the abundant use of detail in landscape painting was valid in that medium because
- (A) landscape paintings are meant to convey information
  - (B) abundant detail is representative of our actual perceptions of landscape
  - (C) the details can be seen and comprehended immediately
  - (D) viewers object to paintings that attempt to abstract only the most significant details of a scene
  - (E) viewers can easily scan a painting again to pick out further details
23. It can be inferred from the passage that Cather's hostility to journalism arose from her
- (A) desire to reform readers' tastes
  - (B) dislike for the common newspaper reader
  - (C) lack of success in the field
  - (D) personal conflict with newspaper editors
  - (E) frustration with the demands of the medium
24. The passage suggests that Cather became a journalist in order to
- (A) learn to write dispassionately on a variety of subjects
  - (B) write critical essays on the fine arts
  - (C) change the artistic repute of journalists
  - (D) gather material for a book on the publishing industry
  - (E) improve her prospects for success as a writer
25. Which of the following best summarizes the supporting logic of Cather's assertion that the value of description is "in inverse relation" (line 41) to its length?
- (A) The longer the description, the less the dialogue that can be presented.
  - (B) The longer the description, the less the action that can take place.
  - (C) The longer the description, the less clear its overall effect.
  - (D) The longer the description, the more particular the viewpoint forced on the reader.
  - (E) The longer the description, the more unemotional the description.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

**Practices for GMAT Book 1**

**SECTION 2**

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

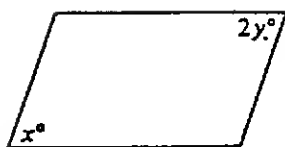
1. Which of the following is NOT a factor of 252?  
(A) 2 (B) 3 (C) 6 (D) 7 (E) 8
2. If a store purchased 6 dozen items at a cost of \$1.80 per dozen and later sold them all for \$0.20 apiece, what was the store's profit on these items?  
(A) \$2.16 (B) \$2.40 (C) \$2.84  
(D) \$3.20 (E) \$3.60
3. If  $0.1x + 0.1 = 1$ , then  $x =$   
(A) 0.1 (B) 0.2 (C) 0.9 (D) 9 (E) 10
4. If  $(124)^2 = 15,376$ , what is  $(124)(248)$ ?  
(A)  $(15,376)^2$   
(B)  $(15,376 \times 2)^2$   
(C)  $(15,376)^2$   
(D)  $15,376 + 2$   
(E)  $15,376 \times 2$
5. If Mario drove 28 kilometers in 22 minutes, approximately what was his average speed in kilometers per hour?  
(A) 13 (B) 47 (C) 66 (D) 76 (E) 127

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**Practices for GMAT Book 1**

6. If the average (arithmetic mean) of  $x$ ,  $y$ , and  $z$  is an even integer, then  $x + y + z$  could be  
(A) 15 (B) 16 (C) 18 (D) 20 (E) 21
7.  $\sqrt{18} + \sqrt{32} =$   
(A) 25  
(B)  $5\sqrt{2}$   
(C)  $7\sqrt{2}$   
(D)  $13\sqrt{2}$   
(E)  $25\sqrt{2}$
8. If  $14.75 = 1,475 \times n$ , then  $n =$   
(A) 0.001 (B) 0.01 (C) 0.1 (D) 10 (E) 100
9. Fifty percent of the subscribers to newspaper  $X$  are corporate managers and, of these, 30 percent are in the financial field. If 40 percent of the subscribers who are corporate managers in the financial field are money managers, how many of the newspaper's 25,000 subscribers are corporate money managers in the financial field?  
(A) 1,500  
(B) 3,000  
(C) 3,750  
(D) 7,500  
(E) 8,750

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10. If the figure above is a parallelogram, what is the value of  $y$  in terms of  $x$ ?

(A)  $\frac{x}{2}$  (B)  $2x$  (C)  $90 - x$   
 (D)  $180 - \frac{x}{2}$  (E)  $\frac{180 - x}{2}$

11. Ann, Mark, Dave, and Paula line up at a ticket window. In how many ways can they arrange themselves so that Dave is third in line from the window?

(A) 24  
 (B) 12  
 (C) 9  
 (D) 6  
 (E) 3

12. The number of bacteria in a certain culture doubles once every minute. If there were  $p$  bacteria in the culture at 8:55 a.m., how many bacteria were there at 9:00 a.m. the same morning?

(A)  $10p$  (B)  $32p$  (C)  $5p^2$  (D)  $2p^5$  (E)  $32p^5$

$$(-x)^3 = -(x^3)$$

13. For what values of  $x$  is the equation above true?

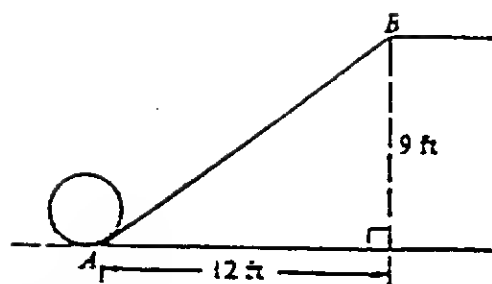
(A) None  
 (B) 0 and 1 only  
 (C) Positive values only  
 (D) Negative values only  
 (E) All values

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14. José took a 3-hour bicycle ride. In the second hour, he traveled 18 miles, which was 20 percent farther than he traveled the first hour. If he traveled 25 percent farther in the third hour than he did in the second hour, how many miles did José travel during the entire ride?
- (A) 54.0  
(B) 54.9  
(C) 55.5  
(D) 57.0  
(E) 63.0
15. The current ratio of men to women on a certain board of trustees is 2 to 5. If 4 men were added to the board, the ratio of men to women would be 2 to 3. How many men are currently on the board?
- (A) 2  
(B) 4  
(C) 5  
(D) 6  
(E) 8
16. When Inez and Fernando purchased a property for \$20,000, Fernando contributed  $\frac{1}{3}$  the amount contributed by Inez for the purchase. If they sold the property for \$40,000 and shared this amount in proportion to their respective contributions, how much was Fernando's share?
- (A) \$5,000  
(B) \$10,000  
(C) \$13,333  
(D) \$20,000  
(E) \$26,666
17. If  $-3 \leq x \leq 7$  and  $-6 \leq y \leq 2$ , what is the smallest possible value of  $x - 2y$ ?
- (A) -15 (B) -9 (C) -7 (D) 0 (E) 9

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18. In the figure above,  $AB$  represents a ramp and the circle represents a wheel that has radius 1.5 feet. If the wheel is rolled to the top of the ramp, which of the following is closest to the number of revolutions it will make?

(A)  $1\frac{2}{3}$  (B) 2 (C)  $3\frac{1}{2}$  (D) 5 (E) 10

19. What is the least odd integer, greater than 1, that is both the square of an integer and the cube of an integer?

(A) 9 (B) 27 (C) 81 (D) 243 (E) 729

20. If 5 machines run at the same constant rate, they can complete a certain job in 8 hours. If only 3 of these machines run at this rate, how many more minutes will be required to complete the same job?

(A) 38  
(B) 72  
(C) 80  
(D) 90  
(E) 96

## STOP

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DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 4

Time—30 minutes

20 Questions

Directions: For each question in this section, select the best of the answer choices given.

1. After the national speed limit of 55 miles per hour was imposed in 1974, the number of deaths per mile driven on a highway fell abruptly as a result. Since then, however, the average speed of vehicles on highways has risen, but the number of deaths per mile driven on a highway has continued to fall.

Which of the following conclusions can be properly drawn from the statements above?

- (A) The speed limit alone is probably not responsible for the continued reduction in highway deaths in the years after 1974.
  - (B) People have been driving less since 1974.
  - (C) Driver-education courses have been more effective since 1974 in teaching drivers to drive safely.
  - (D) In recent years highway patrols have been less effective in catching drivers who speed.
  - (E) The change in the speed limit cannot be responsible for the abrupt decline in highway deaths in 1974.
2. Neighboring landholders: Air pollution from the giant aluminum refinery that has been built next to our land is killing our plants.

Company spokesperson: The refinery is not to blame, since our study shows that the damage is due to insects and fungi.

Which of the following, if true, most seriously weakens the conclusion drawn by the company spokesperson?

- (A) The study did not measure the quantity of pollutants emitted into the surrounding air by the aluminum refinery.
- (B) The neighboring landholders have made no change in the way they take care of their plants.
- (C) Air pollution from the refinery has changed the chemical balance in the plants' environment, allowing the harmful insects and fungi to thrive.
- (D) Pollutants that are invisible and odorless are emitted into the surrounding air by the refinery.
- (E) The various species of insects and fungi mentioned in the study have been occasionally found in the locality during the past hundred years.

3. Sales taxes tend to be regressive, affecting poor people more severely than wealthy people. When all purchases of consumer goods are taxed at a fixed percentage of the purchase price, poor people pay a larger proportion of their income in sales taxes than wealthy people do.

It can be correctly inferred on the basis of the statements above that which of the following is true?

- (A) Poor people constitute a larger proportion of the taxpaying population than wealthy people do.
- (B) Poor people spend a larger proportion of their income on purchases of consumer goods than wealthy people do.
- (C) Wealthy people pay, on average, a larger amount of sales taxes than poor people do.
- (D) The total amount spent by all poor people on purchases of consumer goods exceeds the total amount spent by all wealthy people on consumer goods.
- (E) The average purchase price of consumer goods bought by wealthy people is higher than that of consumer goods bought by poor people.

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4. Reviewing historical data, medical researchers in California found that counties with the largest number of television sets per capita have had the lowest incidence of a serious brain disease, mosquito-borne encephalitis. The researchers have concluded that people in these counties stay indoors more and thus avoid exposure to the disease.

The researchers' conclusion would be most strengthened if which of the following were true?

- (A) Programs designed to control the size of disease-bearing mosquito populations have not affected the incidence of mosquito-borne encephalitis.
- (B) The occupations of county residents affect their risk of exposure to mosquito-borne encephalitis more than does television-watching.
- (C) The incidence of mosquito-borne encephalitis in counties with the largest number of television sets per capita is likely to decrease even further.
- (D) The more time people in a county spend outdoors, the greater their awareness of the dangers of mosquito-borne encephalitis.
- (E) The more television sets there are per capita in a county, the more time the average county resident spends watching television.

5. The city's public transportation system should be removed from the jurisdiction of the municipal government, which finds it politically impossible either to raise fares or to institute cost-saving reductions in service. If public transportation were handled by a private firm, profits would be vigorously pursued, thereby eliminating the necessity for covering operating costs with government funds.

The statements above best support the conclusion that

- (A) the private firms that would handle public transportation would have experience in the transportation industry
- (B) political considerations would not prevent private firms from ensuring that revenues cover operating costs
- (C) private firms would receive government funding if it were needed to cover operating costs
- (D) the public would approve the cost-cutting actions taken by the private firm
- (E) the municipal government would not be resigned to accumulating merely enough income to cover costs

6. To entice customers away from competitors, Red Label supermarkets have begun offering discounts on home appliances to customers who spend \$50 or more on any shopping trip to Red Label. Red Label executives claim that the discount program has been a huge success, since cash register receipts of \$50 or more are up thirty percent since the beginning of the program.

Which of the following, if true, most seriously weakens the claim of the Red Label executives?

- (A) Most people who switched to Red Label after the program began spend more than \$50 each time they shop at Red Label.
- (B) Most people whose average grocery bill is less than \$50 would not be persuaded to spend more by any discount program.
- (C) Most people who received discounts on home appliances through Red Label's program will shop at Red Label after the program ends.
- (D) Since the beginning of the discount program, most of the people who spend \$50 or more at Red Label are people who have never before shopped there and whose average grocery bill has always been higher than \$50.
- (E) Almost all of the people who have begun spending \$50 or more at Red Label since the discount program began are longtime customers who have increased the average amount of their shopping bills by making fewer trips.

7. Throughout the 1950's, there were increases in the numbers of dead birds found in agricultural areas after pesticide sprayings. Pesticide manufacturers claimed that the publicity given to bird deaths stimulated volunteers to look for dead birds, and that the increase in numbers reported was attributable to the increase in the number of people looking.

Which of the following statements, if true, would help to refute the claim of the pesticide manufacturers?

- (A) The publicity given to bird deaths was largely regional and never reached national proportions.
- (B) Pesticide sprayings were timed to coincide with various phases of the life cycles of the insects they destroyed.
- (C) No provision was made to ensure that a dead bird would not be reported by more than one observer.
- (D) Initial increases in bird deaths had been noticed by agricultural workers long before any publicity had been given to the matter.
- (E) Dead birds of the same species as those found in agricultural areas had been found along coastal areas where no farming took place.

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8. Teen-agers are often priced out of the labor market by the government-mandated minimum-wage level because employers cannot afford to pay that much for extra help. Therefore, if Congress institutes a subminimum wage, a new lower legal wage for teen-agers, the teen-age unemployment rate, which has been rising since 1960, will no longer increase.

Which of the following, if true, would most weaken the argument above?

- (A) Since 1960 the teen-age unemployment rate has risen when the minimum wage has risen,
- (B) Since 1960 the teen-age unemployment rate has risen even when the minimum wage remained constant.
- (C) Employers often hire extra help during holiday and warm weather seasons.
- (D) The teen-age unemployment rate rose more quickly in the 1970's than it did in the 1960's
- (E) The teen-age unemployment rate has occasionally declined in the years since 1960.

9. Which of the following best completes the passage below?

The computer industry's estimate that it loses millions of dollars when users illegally copy programs without paying for them is greatly exaggerated. Most of the illegal copying is done by people with no serious interest in the programs. Thus, the loss to the industry is much smaller than estimated because

- (A) many users who illegally copy programs never find any use for them
- (B) most of the illegally copied programs would not be purchased even if purchasing them were the only way to obtain them
- (C) even if the computer industry received all the revenue it claims to be losing, it would still be experiencing financial difficulties
- (D) the total market value of all illegal copies is low in comparison to the total revenue of the computer industry
- (E) the number of programs that are frequently copied illegally is low in comparison to the number of programs available for sale

10. This year the New Hampshire Division of Company X set a new record for annual sales by that division. This record is especially surprising since the New Hampshire Division has the smallest potential market and the lowest sales of any of Company X's divisions.

Which of the following identifies a flaw in the logical coherence of the statement above?

- (A) If overall sales for Company X were sharply reduced, the New Hampshire Division's new sales record is irrelevant to the company's prosperity.
- (B) Since the division is competing against its own record, the comparison of its sales record with that of other divisions is irrelevant.
- (C) If this is the first year that the New Hampshire Division has been last in sales among Company X's divisions, the new record is not surprising at all.
- (D) If overall sales for Company X were greater than usual, it is not surprising that the New Hampshire Division was last in sales.
- (E) Since the New Hampshire Division has the smallest potential market, it is not surprising that it had the lowest sales.

11. Statement of a United States copper mining company: Import quotas should be imposed on the less expensive copper mined outside the country to maintain the price of copper in this country; otherwise, our companies will not be able to stay in business.

Response of a United States copper wire manufacturer: United States wire and cable manufacturers purchase about 70 percent of the copper mined in the United States. If the copper prices we pay are not at the international level, our sales will drop, and then the demand for United States copper will go down.

If the factual information presented by both companies is accurate, the best assessment of the logical relationship between the two arguments is that the wire manufacturer's argument

- (A) is self-serving and irrelevant to the proposal of the mining company
- (B) is circular, presupposing what it seeks to prove about the proposal of the mining company
- (C) shows that the proposal of the mining company would have a negative effect on the mining company's own business
- (D) fails to give a reason why the proposal of the mining company should not be put into effect to alleviate the concern of the mining company for staying in business
- (E) establishes that even the mining company's business will prosper if the mining company's proposal is rejected

12. Y has been believed to cause Z. A new report, noting that Y and Z are often observed to be preceded by X, suggests that X, not Y, may be the cause of Z.

Which of the following further observations would best support the new report's suggestion?

- (A) In cases where X occurs but Y does not, X is usually followed by Z.
- (B) In cases where X occurs, followed by Y, Y is usually followed by Z.
- (C) In cases where Y occurs but X does not, Y is usually followed by Z.
- (D) In cases where Y occurs but Z does not, Y is usually preceded by X.
- (E) In cases where Z occurs, it is usually preceded by X and Y.

13. Mr. Primm: If hospitals were private enterprises, dependent on profits for their survival, there would be no teaching hospitals, because of the intrinsically high cost of running such hospitals.

Ms. Nakai: I disagree. The medical challenges provided by teaching hospitals attract the very best physicians. This, in turn, enables those hospitals to concentrate on nonroutine cases.

Which of the following, if true, would most strengthen Ms. Nakai's attempt to refute Mr. Primm's claim?

- (A) Doctors at teaching hospitals command high salaries.
- (B) Sophisticated, nonroutine medical care commands a high price.
- (C) Existing teaching hospitals derive some revenue from public subsidies.
- (D) The patient mortality rate at teaching hospitals is high.
- (E) The modern trend among physicians is to become highly specialized.

14. Women generally do not receive lower pay for doing precisely the same work as men. Rather, regardless of their skills, women have disproportionately high representation in jobs traditionally paying lower wages. If jobs paid according to the skills and education required by them, this de facto segregation would not exist.

If the statements above are true, which of the following is most likely to be true?

- (A) Some jobs performed by more men than women pay higher wages than jobs requiring comparable skills, but performed by more women than men.
- (B) Regardless of sex or occupation, a person should be paid an amount sufficient to support his or her household.
- (C) As men enter a field, earnings tend to rise, not only for men but also for the women in the field.
- (D) Little percentage gain has occurred in the number of women holding jobs traditionally held by men.
- (E) Generally accepted methods are available for evaluating the level of skill required in, and hence the appropriate pay for, any job traditionally held by women.

15. Six months or so after getting a video recorder, many early buyers apparently lost interest in obtaining videos to watch on it. The trade of businesses selling and renting videos is still buoyant, because the number of homes with video recorders is still growing. But clearly, once the market for video recorders is saturated, businesses distributing videos face hard times.

Which of the following, if true, would most seriously weaken the conclusion above?

- (A) The market for video recorders would not be considered saturated until there was one in 80 percent of homes.
- (B) Among the items handled by video distributors are many films specifically produced as video features.
- (C) Few of the early buyers of video recorders raised any complaints about performance aspects of the new product.
- (D) The early buyers of a novel product are always people who are quick to acquire novelties, but also often as quick to tire of them.
- (E) In a shrinking market, competition always intensifies and marginal businesses fail.

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16. Advertiser: The revenue that newspapers and magazines earn by publishing advertisements allows publishers to keep the prices per copy of their publications much lower than would otherwise be possible. Therefore, consumers benefit economically from advertising.

Consumer: But who pays for the advertising that pays for low-priced newspapers and magazines? We consumers do, because advertisers pass along advertising costs to us through the higher prices they charge for their products.

Which of the following best describes how the consumer counters the advertiser's argument?

- (A) By alleging something that, if true, would weaken the plausibility of the advertiser's conclusion
  - (B) By questioning the truth of the purportedly factual statement on which the advertiser's conclusion is based
  - (C) By offering an interpretation of the advertiser's opening statement that, if accurate, shows that there is an implicit contradiction in it
  - (D) By pointing out that the advertiser's point of view is biased
  - (E) By arguing that the advertiser too narrowly restricts the discussion to the effects of advertising that are economic
17. Mr. Lawson: We should adopt a national family policy that includes legislation requiring employers to provide paid parental leave and establishing government-sponsored day care. Such laws would decrease the stress levels of employees who have responsibility for small children. Thus, such laws would lead to happier, better-adjusted families.

Which of the following, if true, would most strengthen the conclusion above?

- (A) An employee's high stress level can be a cause of unhappiness and poor adjustment for his or her family.
- (B) People who have responsibility for small children and who work outside the home have higher stress levels than those who do not.
- (C) The goal of a national family policy is to lower the stress levels of parents.
- (D) Any national family policy that is adopted would include legislation requiring employers to provide paid parental leave and establishing government-sponsored day care.
- (E) Most children who have been cared for in day-care centers are happy and well adjusted.

18. Lark Manufacturing Company initiated a voluntary Quality Circles program for machine operators. Independent surveys of employee attitudes indicated that the machine operators participating in the program were less satisfied with their work situations after two years of the program's existence than they were at the program's start. Obviously, any workers who participate in a Quality Circles program will, as a result, become less satisfied with their jobs.

Each of the following, if true, would weaken the conclusion drawn above EXCEPT:

- (A) The second survey occurred during a period of recession when rumors of cutbacks and layoffs at Lark Manufacturing were plentiful.
- (B) The surveys also showed that those Lark machine operators who neither participated in Quality Circles nor knew anyone who did so reported the same degree of lessened satisfaction with their work situations as did the Lark machine operators who participated in Quality Circles.
- (C) While participating in Quality Circles at Lark Manufacturing, machine operators exhibited two of the primary indicators of improved job satisfaction: increased productivity and decreased absenteeism.
- (D) Several workers at Lark Manufacturing who had participated in Quality Circles while employed at other companies reported that, while participating in Quality Circles in previous companies, their work satisfaction had increased.
- (E) The machine operators who participated in Quality Circles reported that, when the program started, they felt that participation might improve their work situations.

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Questions 19-20 are based on the following.

Blood banks will shortly start to screen all donors for NANB hepatitis. Although the new screening tests are estimated to disqualify up to 5 percent of all prospective blood donors, they will still miss two-thirds of donors carrying NANB hepatitis. Therefore, about 10 percent of actual donors will still supply NANB-contaminated blood.

19. The argument above depends on which of the following assumptions?

- (A) Donors carrying NANB hepatitis do not, in a large percentage of cases, carry other infections for which reliable screening tests are routinely performed.
- (B) Donors carrying NANB hepatitis do not, in a large percentage of cases, develop the disease themselves at any point.
- (C) The estimate of the number of donors who would be disqualified by tests for NANB hepatitis is an underestimate.
- (D) The incidence of NANB hepatitis is lower among the potential blood donors than it is in the population at large.
- (E) The donors who will still supply NANB-contaminated blood will donate blood at the average frequency for all donors.

20. Which of the following inferences about the consequences of instituting the new tests is best supported by the passage above?

- (A) The incidence of new cases of NANB hepatitis is likely to go up by 10 percent.
- (B) Donations made by patients specifically for their own use are likely to become less frequent.
- (C) The demand for blood from blood banks is likely to fluctuate more strongly.
- (D) The blood supplies available from blood banks are likely to go down.
- (E) The number of prospective first-time donors is likely to go up by 5 percent.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



## Practices for GMAT Book 1

### SECTION 5

Time—30 minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to fill in the corresponding oval

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

You may assume that the position of points, angles, regions, etc., exist in the order shown.

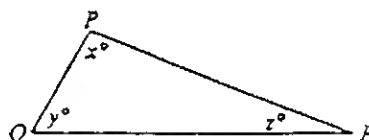
All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

(1)  $PQ = PR$

(2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

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**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

1. What were Dan's wages last year?

- (1) Last year Dan's and Joan's combined wages were \$44,000.
- (2) Last year Joan's wages were 20 percent higher than Dan's wages.

2. What was the purchase price of the Sullivans' house?

- (1) The market value of the Sullivans' house is \$120,000.
- (2) The Sullivans' house has a mortgage of \$88,000, which is 80 percent of its purchase price.

3. If  $y$  is positive, what is the value of  $x$ ?

- (1)  $y$  is equal to  $\frac{1}{3}$  of  $5x$ .
- (2)  $2y$  is equal to 12.

4. If Sue is more than a year old, is Paul older than Sue?

- (1) Paul is 3 times as old as Sue.
- (2) Sue is 10 years younger than Paul.

5. Does line  $\ell_1$  contain point  $M$ ?

- (1) Line  $\ell_2$  contains point  $M$ .
- (2) Lines  $\ell_1$  and  $\ell_2$  intersect.

6. At 12:00 noon two trains pulled out of stations that were 350 miles apart and traveled toward each other on parallel tracks until they met. What was the total distance traveled by the trains in the last hour before they met?

- (1) One of the trains traveled at a constant rate of 47.35 miles per hour.
- (2) One of the trains traveled at a constant rate of 57.65 miles per hour.

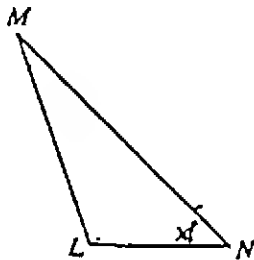
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Practices for GMAT Book 1

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

7. How many parking spaces are occupied in a certain parking lot?

- (1) There are 100 unoccupied parking spaces.
- (2) If 10 more parking spaces were occupied, 15 percent of the parking spaces would be unoccupied.



8. What is the perimeter of  $\triangle LMN$  above?

- (1) The area of region  $LMN$  is 6.
- (2)  $x = 45$

9. What is the value of the positive integer  $m$ ?

- (1)  $m^2 = 2m$
- (2)  $m$  is even

10. Company  $X$  has budgeted \$28,000 for bonuses to be distributed to its 40 employees, all of whom are either office or production workers. What bonus will each production worker receive?

- (1) Company  $X$  has 4 times as many production workers as office workers.
- (2) The bonus for each production worker will be 50 percent greater than the bonus for each office worker.

11. If the pages of a term paper were numbered consecutively, with the first page numbered 1, how many pages did the term paper have?

- (1) A total of 87 digits were used in numbering the pages.
- (2) The digit 6 was used only 5 times in numbering the pages.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

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12. What is the value of the average (arithmetic mean) of  $s$ ,  $t$ , and  $u$ ?

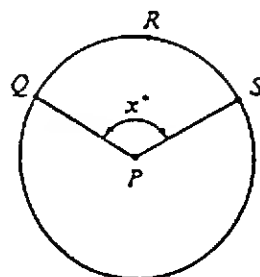
- (1)  $s + u = 5t$
- (2)  $t + u = 7$

13. Is  $r$  equal to  $2s$ ?

- (1)  $r$  is 200 percent of  $s$ .
- (2)  $r$  is  $66\frac{2}{3}$  percent of  $r + s$ .

14. What is the value of  $x^4 + 2x^2 + 12$ ?

- (1)  $x = 2$  or  $x = -2$
- (2)  $x^4 + 2x^2 - 12 = 12$



15. If  $P$  is the center of the circle above, what is the value of  $x$ ?

- (1) The length of arc  $QRS$  is  $\frac{1}{3}$  the circumference of the circle.
- (2) The radius of the circle is 5.

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Practices for GMAT Book 1

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- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

16. If  $\Delta$  and  $\square$  denote the tens' and units' digits, respectively, of the six-digit number  $431,2\Delta\square$ , is  $1,2\Delta\square$  divisible by 4?

- (1) The integer  $431,2\Delta\square$  is divisible by 4.
- (2)  $\Delta + \square = 12$

17. Of the 1,500 models registered with a certain modeling agency, what is the total number of female models with brown hair?

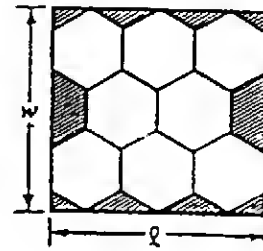
- (1) The percent of the male models who have brown hair is equal to the percent of the female models who do not have brown hair.
- (2) The agency has 300 male models with brown hair.

18. Is  $\frac{k}{21}$  an integer?

- (1)  $\frac{k}{14}$  is an integer.
- (2)  $\frac{k}{3}$  is an integer.

19. Is the largest of three consecutive integers odd?

- (1) The product of the three integers is 0.
- (2) The sum of the three integers is 0.



20. The figure above represents a rectangular tile. The eight hexagons in the design are equilateral and equiangular. What is the area of the tile?

- (1)  $w = 5$  inches
- (2)  $l = 3\sqrt{3}$  inches

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

21. Stores  $R$  and  $S$  each discounted their selling prices of a certain television model. Is the discounted price of the television at store  $R$  less than the discounted price at store  $S$ ?

- (1) The selling price of the television is discounted by 25 percent at store  $R$  and by 30 percent at store  $S$ .
- (2) The selling price of the television is \$40 lower at store  $R$  than at store  $S$ .



22. Three identical balls are stacked vertically inside a circular cylindrical can so that the balls are tangent to each other and to the surface of the can, as shown above. What is the volume of the inside of the can?

- (1) The radius of each ball is  $1\frac{1}{2}$  inches.
- (2) The inside height of the can is 9 inches.

23. If  $x$  and  $y$  are positive integers, and if  $x$  is a prime factor of  $y$ , is  $x^2$  a factor of  $y$ ?

- (1)  $x < 6$
- (2)  $y = 36$

24. Two groups of students,  $X$  and  $Y$ , took the same test. If the average (arithmetic mean) score for group  $X$  was 68.2, what was the average score for the combined group?

- (1) The average score for group  $Y$  was 73.5.
- (2) Group  $X$  had 20 more students than group  $Y$ .

25. If  $xy \neq 0$ , what is the value of  $\frac{(x^2)^3 y^4}{x}$ ?

- (1)  $x^3 y^5 = \frac{6y}{x^2}$
- (2)  $x = 2y$

# STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 6

Time—30 minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise choose one of the others. Select the best version and fill in the corresponding space on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence; this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. During the Industrial Revolution, England meted out the death penalty for more than two hundred offenses, including stealing turnips, to associate with gypsies, cut down a tree, or to pick pockets.  
(A) to associate with gypsies, cut down a tree, or to pick  
(B) to associate with gypsies, to cut down a tree, or to pick  
(C) associating with gypsies, cutting down a tree, or picking  
(D) associating with gypsies, cut down a tree, or pick  
(E) to associate with gypsies, cut down a tree, or pick
2. The cardiac research center is experimenting with a drug called streptokinase that can stop a heart attack as they are still in progress.  
(A) as they are still in progress  
(B) as they progress  
(C) as it is still progressing  
(D) while still progressing  
(E) while it is still in progress
3. Over half of all the agricultural products in the world, including tomatoes, potatoes, and tapioca, was first grown by the indigenous populations of Central and South America.  
(A) was first grown  
(B) was grown for the first time  
(C) was grown for at first  
(D) were grown at first  
(E) were first grown
4. A native of Kansas who had a bank account at age seven and was paying the family bills at age eleven, Olive Ann Beech's business mind was behind Beech Aviation from the 1930's, when she and her husband founded the company, until its sale in 1980.  
(A) Olive Ann Beech's business mind was  
(B) it was the business mind of Olive Ann Beech that was  
(C) Olive Ann Beech was the one whose business mind was  
(D) Olive Ann Beech was the business mind  
(E) the business mind of Olive Ann Beech was
5. According to medieval monks, the remains of King Arthur and Queen Guinevere were found at Glastonbury Abbey in A.D. 1191, and Arthur's coffin marked with the inscription (in Latin): "Here Lies Arthur, The Once and Future King."  
(A) and Arthur's coffin marked with the inscription  
(B) Arthur's coffin marked with the inscription  
(C) and the inscription was marked on Arthur's coffin  
(D) the inscription that was marked on the coffin of Arthur  
(E) the coffin of Arthur had the inscription marked

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6. Unlike many other products of advanced technology, analysts and retailers agree that computers are generally cheaper and of better quality than they once were.
- (A) Unlike many other products of advanced technology, analysts and retailers agree that computers are generally cheaper and of
  - (B) Computers, unlike many other products of advanced technology, it is agreed by analysts and retailers, are in general cheaper and
  - (C) Unlike many other products of advanced technology, analysts and retailers agree that in general computers are cheaper and of
  - (D) Analysts and retailers agree that computers, unlike many other products of advanced technology, are generally cheaper and of
  - (E) Analysts and retailers agree, computers, unlike many other products of advanced technology, are generally cheaper and
7. If Charles had spent half as much time attending his classes as he did complaining about them, he would have been a good student.
- (A) had spent half as much time attending his classes as he did complaining
  - (B) had spent half as much time to attend his classes as he did to complain
  - (C) were to spend half as much time attending his classes as he does complaining
  - (D) were to spend half as much time attending his classes as complaining
  - (E) should spend half as much time attending his classes as to complain
8. Experts believe that the process of "desertification" could encompass half the continent should current patterns of land use be allowed that they will continue.
- (A) should current patterns of land use be allowed that they will continue
  - (B) should current patterns of land use be allowed to continue
  - (C) should there be a continuance of allowed current land-use patterns
  - (D) if there is the allowing of current land-use patterns to continue
  - (E) if there is a continuance of allowed current land-use patterns
9. It has traditionally been thought that all biological functions decline with age, but according to the National Institute on Aging, certain important capabilities, such as the output of the heart under stress and intellectual vigor, remain essentially unchanged.
- (A) the output of the heart under stress and intellectual vigor
  - (B) the heart's output under stress and intellectual vigor
  - (C) intellectual vigor and the output of the heart under stress
  - (D) intellectual vigor and the effect of stress on the heart's output
  - (E) the effect of stress on the heart's output and intellectual vigor

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10. The suspect is facing charges that he illegally published telephone credit card numbers, intending that they be used by others to avoid telephone billings.
- (A) intending that they be used by others to avoid telephone billings
  - (B) with the intent of others using them to avoid telephone billings
  - (C) intending that telephone billings could be avoided by others using them
  - (D) with the intent of their use by others to avoid telephone billings
  - (E) with the intent that telephone billings would be avoided by others through their use
11. Longtime California highway engineers say that in no period did the Pacific Coast Highway take a worse battering than it did in the winter and spring of 1983, nor was there ever a greater mud slide in the region than the one that occurred on May 2, 1983.
- (A) did the Pacific Coast Highway take a worse battering than it did in the winter and spring of 1983, nor
  - (B) had the Pacific Coast Highway taken a worse battering than it did in the winter and spring of 1983, or
  - (C) has the Pacific Coast Highway taken a worse battering than it had in the winter and spring of 1983, or
  - (D) did the Pacific Coast Highway take a worse battering than it had in the winter and spring of 1983, or
  - (E) did the Pacific Coast Highway take a worse battering than it has in the winter and spring of 1983, nor
12. Seeking to give the laity a greater role in the liturgy, a sweeping reform of worship that included prayers in the vernacular and a rite in which the priest faces the congregation was authorized by the Second Vatican Council.
- (A) a sweeping reform of worship that included prayers in the vernacular and a rite in which the priest faces the congregation was authorized by the Second Vatican Council
  - (B) a sweeping reformation of worship including prayers in the vernacular and a rite in which the priest faces the congregation were authorized by the Second Vatican Council
  - (C) prayers in the vernacular and a rite in which the priest faces the congregation were included in the sweeping reform of worship authorized by the Second Vatican Council
  - (D) praying in the vernacular and a rite in which the priest faces the congregation were included in the sweeping reform of worship the Second Vatican Council authorized
  - (E) the Second Vatican Council authorized a sweeping reform of worship which included prayers in the vernacular and a rite in which the priest faces the congregation
13. In contrast to Freud, many psychologists now think that "slips of the tongue" are not fraught with hidden meaning and are only substitutions of some better-learned response for one that is less familiar, though intended.
- (A) many psychologists now think that "slips of the tongue" are not fraught with hidden meaning and are
  - (B) many psychologists now think of "slips of the tongue" not as fraught with hidden meaning but
  - (C) many psychologists now think that "slips of the tongue" are not fraught with hidden meaning but are
  - (D) it is now thought by many psychologists that "slips of the tongue" are not fraught with hidden meaning but
  - (E) "slips of the tongue" are now thought by many psychologists not to be fraught with hidden meaning and are

GO ON TO THE NEXT PAGE.

14. The herring gull population in the North Atlantic is now thirty times larger than in the beginning of the century.
- (A) than in
  - (B) than they were at
  - (C) than it was at
  - (D) compared to that of
  - (E) compared to what they were at
15. The only strategic metal in which the United States is self-sufficient, molybdenum is a soft substance that can, paradoxically, be used to harden steel in alloys, as well as as a lubricant, and, in trace amounts, in nutritional supplements to help prevent tooth decay.
- (A) to harden steel in alloys, as well as as a lubricant, and, in trace amounts, in nutritional supplements
  - (B) to harden steel in alloys, as well as a lubricant, and a nutritional supplement in trace amounts
  - (C) in alloys to harden steel, as well as a lubricant and nutritional supplement in trace amounts
  - (D) in alloys to harden steel; it can also be used as a lubricant and, in trace amounts, as a nutritional supplement
  - (E) in alloys to harden steel; it can also be used as well as a lubricant and nutritional supplement in trace amounts
16. The Census Bureau predicts that within the next ten years a significant number of Black executives in the United States will have left corporate jobs so as to start their own businesses, as many Black engineers and computer experts have done already.
- (A) have left corporate jobs so as to start their own businesses, as many Black engineers and computer experts have done already
  - (B) have left corporate jobs so they can start their own businesses, as have many Black engineers and computer experts already
  - (C) have left corporate jobs to start their own businesses, as did many Black engineers and computer experts already
  - (D) leave corporate jobs to start their own businesses, as many Black engineers and computer experts have done already
  - (E) leave corporate jobs so as to start their own businesses, as many Black engineers and computer experts already have left
17. Municipalities have begun demanding that private developers pay an increased share of the costs of expanding the current road networks, sewer systems, and other public services to accommodate new development projects.
- (A) demanding that private developers pay an increased share of the costs of expanding
  - (B) demanding private developers to pay for an increased share of the costs of expanding
  - (C) demanding payment by private developers for an increased share of the costs of expanding
  - (D) to demand that private developers pay for an increased share of the costs to expand
  - (E) to demand that private developers should pay an increased share of the costs to expand
18. Though the remains of some of the oldest hominid specimens have almost turned to stone as molecules of minerals have saturated the bone, most are not mineralized, only partially are so.
- (A) only partially are so
  - (B) only in part
  - (C) only partially
  - (D) or only in part
  - (E) or are only partially so
19. By using a blend of saccharin and aspartame to sweeten diet soda, with saccharin as the primary sweetener, it enables manufacturers to take advantage of the stability and low cost of saccharin and the good taste and better safety reputation of aspartame.
- (A) By using a blend of saccharin and aspartame to sweeten diet soda, with saccharin as the primary sweetener, it enables manufacturers
  - (B) Using a blend of saccharin and aspartame to sweeten diet soda, with saccharin as the primary sweetener, enables manufacturers
  - (C) If manufacturers would sweeten diet soda by using a blend of saccharin and aspartame, with saccharin as the primary sweetener, it enables them
  - (D) If manufacturers sweeten diet soda with a blend of saccharin and aspartame, using saccharin as the primary sweetener, it enables them
  - (E) If they sweeten diet soda with a blend of saccharin and aspartame, using saccharin as the primary sweetener, that enables manufacturers

GO ON TO THE NEXT PAGE.

20. Economists generally agree that any sustained change in the value of the dollar relative to other currencies takes between twelve to eighteen months to affect the balance of trade.
- (A) between twelve to eighteen months to affect the balance of trade
  - (B) between twelve to eighteen months for the balance of trade to be affected
  - (C) from twelve to eighteen months before the balance of trade will be affected
  - (D) from twelve to eighteen months to affect the balance of trade
  - (E) from twelve to eighteen months for it to affect the balance of trade
21. Acid rain is considered not yet so serious a problem in the West as in the East, where hundreds of lakes have been rendered sterile by increased acidity.
- (A) considered not yet so serious a problem in the West as
  - (B) considered not so serious a problem yet in the West as
  - (C) not yet considered so serious a problem in the West as it is
  - (D) not considered as yet the serious problem in the West that it is
  - (E) not as yet considered that serious a problem in the West as
22. The First National Bank of Boston pleaded guilty in a federal district court for failing to report \$1.2 billion in cash transfers to Swiss banks.
- (A) for failing to report
  - (B) for its failure to report
  - (C) for its failure in reporting
  - (D) to its failure in reporting
  - (E) to failing to report
23. Analysis of earthquake waves that have traversed the Earth's interior along various routes have revealed soft, hot areas where semimolten rock may be rising toward the surface.
- (A) that have traversed the Earth's interior along various routes have revealed soft, hot areas where semimolten rock
  - (B) having traversed the Earth's interior along various routes have revealed soft, hot areas of semimolten rock that
  - (C) having traversed the Earth's interior along various routes have revealed areas that are soft and hot, where semimolten rock
  - (D) that have traversed the Earth's interior along various routes has revealed soft, hot areas where semimolten rock
  - (E) that have traversed the Earth's interior along various routes has revealed semimolten rock in soft, hot areas that
24. In 1800 women bore, on average, 7 children; by the Great Depression such an amount had dropped down to 2.2.
- (A) such an amount had dropped down
  - (B) this figure had dropped
  - (C) such a number had dropped
  - (D) such a number is down
  - (E) the total is down
25. Poor people, who already purchase the cheapest food items—starches, frankfurters, beans, and the like—have no items that they can economize when there is a rise in the overall price of food.
- (A) that they can economize when there is a rise in the overall price of food
  - (B) on which there can be economizing when there is a rise in the overall price of food
  - (C) for economizing if there will be an overall rise in the price of food
  - (D) on which to economize when overall prices of food rise
  - (E) that can be economical when overall prices of food rise

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 7

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. Jim multiplied a number by 5 when he should have divided it by 4. If the result he got was 10, what would have been the result if he had not made the error?

(A)  $\frac{1}{20}$  (B)  $\frac{1}{10}$  (C)  $\frac{1}{5}$  (D)  $\frac{1}{4}$  (E)  $\frac{1}{2}$

2. If  $\frac{x}{y} = \frac{2}{3}$  and  $\frac{y}{z} = \frac{3}{5}$ , then  $\frac{x}{z} =$

(A)  $\frac{10}{3}$  (B)  $\frac{10}{9}$  (C)  $\frac{9}{10}$  (D)  $\frac{2}{3}$  (E)  $\frac{2}{15}$

3. A mail clerk put 1 or 2 stamps on each of 20 envelopes, using a total of 36 stamps. On how many of the envelopes did the clerk put 2 stamps?

(A) 4  
(B) 6  
(C) 8  
(D) 12  
(E) 16

4. If  $36.15 \times 10^3 = n \times 10^6$ , then  $n =$

(A) 0.03615  
(B) 0.3615  
(C) 3.615  
(D) 3.615  
(E) 36,150

5. Reggie had to type 90 letters. During the first day he typed  $\frac{1}{3}$  of the letters, and during the second day he typed  $\frac{2}{5}$  of the remaining letters. How many letters were still untyped at the end of the second day?

(A) 36 (B) 32 (C) 24 (D) 18 (E) 12

GO ON TO THE NEXT PAGE.

6. The cost of a certain coat to a merchant was \$40. The merchant fixes the selling price so that if the selling price were later discounted by 20 percent, the selling price would be 25 percent greater than the cost of the coat. What is the original selling price of the coat?

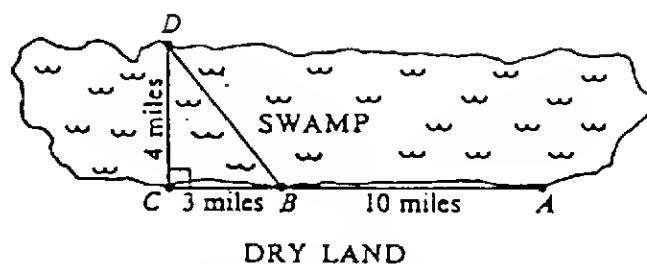
(A) \$150.00  
(B) \$62.50  
(C) \$52.50  
(D) \$50.00  
(E) \$37.50

7. What is  $\frac{3}{4}$  of  $\frac{1}{10}$  of 1 percent of 100,000?

(A) 7.5 (B) 75 (C) 750  
(D) 7,500 (E) 75,000

8. Trade in a certain commodity after the last major depression was 10 percent of what it was before the depression. By what percent did trade in the commodity decline?

(A) 5% (B) 10% (C)  $11\frac{1}{9}\%$   
(D) 55% (E) 90%



9. A cable is being laid from one side of a swamp, at point  $A$ , to the other side, at point  $D$ . If laying cable costs \$500 per mile on dry land and \$800 per mile in the swamp, how much is saved by laying the cable on the  $ABD$  route rather than the  $ACD$  route?

(A) \$700  
(B) \$1,000  
(C) \$1,500  
(D) \$3,200  
(E) \$4,700

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Practices for GMAT Book 1

10.

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12. If  $\frac{7}{1,000} = x\%$ , then  $x =$

- (A) 0.007 (B) 0.07 (C) 0.7 (D) 7 (E) 70

13. If  $L = M + (N - 1)P$  and  $MP \neq 0$ , then  $N =$

(A)  $\frac{L - M}{P}$

(B)  $\frac{L}{P} - M + 1$

(C)  $\frac{L - M + 1}{P}$

(D)  $\frac{L - M + P}{P}$

(E)  $\frac{L}{MP} + 1$

11. During a certain term, 30 percent of the students who enrolled in classes at University  $X$  enrolled in a science course. If no student enrolled in more than one science course, and if 20 percent of the students who enrolled in science enrolled in biology, what percent of the students who enrolled in classes that term enrolled in a science course other than biology?

- (A) 6%  
(B) 7%  
(C) 10%  
(D) 14%  
(E) 24%

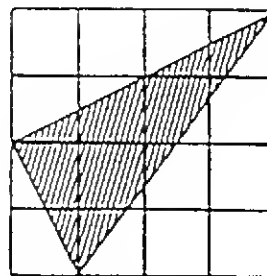
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**Practices for GMAT Book 1**

14. If one hole is drilled in a thin sheet of aluminum every 0.015 second, at this rate, how many holes can be drilled in 1 hour?
- (A) 24,000  
(B) 54,000  
(C) 240,000  
(D) 540,000  
(E) 2,400,000
15. What is the average (arithmetic mean) of  $(x + y)^2$  and  $(x - y)^2$ ?
- (A)  $x^2 + y^2$   
(B)  $x^2 - y^2$   
(C)  $\frac{x^2 + y^2}{2}$   
(D)  $\frac{x^2 - y^2}{2}$   
(E)  $x^2$
16. If the annual sales of the microcomputer industry increase from \$10 billion to \$100 billion over the next 10-year period, then the average (arithmetic mean) amount of increase per year will equal which of the following? (1 billion = 1,000,000,000)
- (A)  $59 \times 10^8$   
(B)  $51 \times 10^9$   
(C)  $59 \times 10^9$   
(D)  $51 \times 10^{10}$   
(E)  $59 \times 10^{10}$
17. The amount of rainfall on Monday was 0.18 inch more than twice the combined amounts on Tuesday and Wednesday. If the amount of rainfall on Monday was 0.76 inch more than twice the amount on Tuesday, what was the amount of rainfall, in inches, on Wednesday?
- (A) 0.29  
(B) 0.47  
(C) 0.49  
(D) 1.16  
(E) 1.34

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18. A positive integer is called "square-free" if it has no factor that is the square of an integer greater than 1. If  $n$  is an even square-free integer, which of the following must also be square-free?



- (A)  $\frac{n}{2}$   
 (B)  $2n$   
 (C)  $n + 2$   
 (D)  $n^2$   
 (E) None of the above
19. During the month of June, the price of a share of stock  $X$  dropped 20 percent and closed on June 30 at \$12 per share. If on August 31, the closing price per share was 10 percent more than it had been on May 31, by what percent did the closing price increase from June 30 to August 31?
- (A) 10%    (B) 27%    (C) 30%  
 (D)  $33\frac{1}{3}\%$     (E)  $37\frac{1}{2}\%$
20. The area of each of the 16 square regions in the figure above is  $T$ . What is the area of the shaded region?
- (A)  $\frac{13T}{3}$   
 (B)  $5T$   
 (C)  $\frac{16T}{3}$   
 (D)  $\frac{11T}{2}$   
 (E)  $7T$

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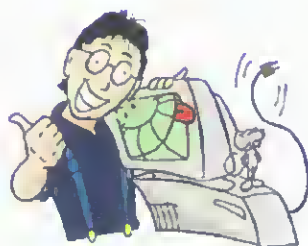
IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
 DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



# Practices for GMAT

## Book 1

# Test 4



## Practices for GMAT Book 1

### SECTION 1

Time—30 minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise, choose one of the others. Select the best version and fill in the corresponding oval on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence; this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. Many American cities have been unsuccessful in their efforts to move mental patients out of mammoth asylums and that treat them in their local communities.
  - (A) to move mental patients out of mammoth asylums and that treat
  - (B) to move mental patients out of mammoth asylums and treat
  - (C) to move mental patients out of mammoth asylums for treating
  - (D) which move mental patients out of mammoth asylums to treat
  - (E) moving mental patients out of mammoth asylums and that treat
2. Until recently, athletes who had received remuneration for any activity that has a link to their athletic prowess is barred from the Olympics.
  - (A) that has a link to their athletic prowess is
  - (B) with links to their athletic prowess has been
  - (C) linked to their athletic prowess was
  - (D) with a link to their athletic prowess is to be
  - (E) linked to their athletic prowess were
3. Arguments against using children as courtroom witnesses are often predicated on the unproved assumption that children's memories are more malleable and less trustworthy than adults.
  - (A) adults
  - (B) that of an adult
  - (C) an adult is
  - (D) those of adults
  - (E) adults are
4. The last years of Booker T. Washington, regarded to be the most influential Black leader of his time, were devoted to building a political power base that extended far beyond the confines of the Tuskegee Institute.
  - (A) The last years of Booker T. Washington, regarded to be the most influential Black leader of his time, were devoted
  - (B) Regarded to be the most influential Black leader of his time, Booker T. Washington's last years were devoted
  - (C) Booker T. Washington, being regarded the most influential Black leader of his time, devoted his last years
  - (D) Being regarded as the most influential Black leader of his time, Booker T. Washington had devoted his last years
  - (E) Booker T. Washington, regarded as the most influential Black leader of his time, devoted his last years

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5. In recent months, there has been considerable debate over if increased taxes should be a first or last resort in balancing the budget.
  - (A) over if increased taxes should be a first or last resort
  - (B) over whether increased taxes should be a first or last resort
  - (C) about increasing taxes being first or last resorts
  - (D) about if increased taxes is a first or last resort
  - (E) concerning tax increases and their being first or last resorts
6. People concerned about telltale signs of age on the face should know that cigarette smoking seems to have two damaging effects: it not only hastens wrinkling of the skin, and it also apparently interferes with the healing process after a face lift.
  - (A) it not only hastens wrinkling of the skin, and it also apparently interferes
  - (B) it not only hastens the wrinkling of the skin, but it also appears that it interferes
  - (C) not only does it hasten the wrinkling of the skin as it also apparently interferes
  - (D) not only does it hasten the wrinkling of the skin, but it also appears to interfere
  - (E) not only is wrinkling of the skin hastened, but it appears to interfere
7. A former director of the Central Intelligence Agency has said that the surveillance capabilities of United States satellites would enable a skilled photographic interpreter to distinguish between Guernsey and Hereford cows grazing in a meadow.
  - (A) between Guernsey and Hereford cows grazing
  - (B) between Guernseys and Hereford cows that graze
  - (C) among Guernseys and Hereford cows that are grazing
  - (D) among Guernsey and Hereford cows as they graze
  - (E) Guernseys from Hereford cows grazing
8. A report by the American Medical Association indicates that a surge in the number of malpractice suits began about ten years ago and efforts to contain it since then had been only partially successful.
  - (A) efforts to contain it since then had been only partially successful
  - (B) efforts since then to contain it were only successful in part
  - (C) that efforts since then to contain it have been only partially successful
  - (D) that efforts to contain it since then only have been partially successful
  - (E) that efforts to contain it since then were only successful in part
9. Freud saw the ability to love and the willingness to work to be hallmarks of full maturity.
  - (A) love and the willingness to work to be
  - (B) love and the willingness to work for
  - (C) love and the willingness to work as
  - (D) love, as he did the willingness to work, to be
  - (E) love, as the willingness to work, as being
10. Sharply fewer ducks are expected to migrate south this fall and may be the lowest figure on record, according to United States and Canadian wildlife experts.
  - (A) Sharply fewer ducks are expected to migrate south this fall and may be
  - (B) It is expected that sharply fewer ducks will migrate south this fall and will perhaps be
  - (C) The ducks expected to migrate south this fall will be sharply reduced, perhaps to
  - (D) The number of ducks that will migrate south this fall is expected to drop sharply, perhaps to
  - (E) A sharp drop is expected in the number of ducks that will migrate south this fall, which may be

GO ON TO THE NEXT PAGE.

11. Some surveys on the use of graphics in business presentations indicate that proposals incorporating graphics stand a twenty percent better chance of being approved than proposals without graphics.
- (A) a twenty percent better chance of being approved than proposals
  - (B) a twenty percent better chance of approval in comparison with those
  - (C) a likelihood they will be approved twenty percent greater than those
  - (D) a twenty percent greater likelihood of approval as compared to proposals
  - (E) twenty percent more likelihood of being approved than do those
12. A pattern of accidents, of personnel problems, and of low performance ratings for mechanical systems have marked the servicing and maintaining of the new power plant.
- (A) have marked the servicing and maintaining
  - (B) have marked the servicing and maintenance
  - (C) have marked the service and maintenance
  - (D) has marked the service and maintaining
  - (E) has marked the servicing and maintenance
13. Black History Month is observed in February, the month of Lincoln's birthday and the generally accepted month of Frederick Douglass' birth, since they were each primary figures in the abolition of slavery.
- (A) since they were each
  - (B) who were both
  - (C) because both men were
  - (D) both of whom were
  - (E) each of whom was one of the
14. If the ice of Greenland and Antarctica were to melt, the sea level would rise at least 100 feet or more.
- (A) If the ice of Greenland and Antarctica were to melt, the sea level would rise at least 100 feet or more.
  - (B) Were the ice of Greenland and Antarctica to melt, the sea level would rise at least 100 feet.
  - (C) Was the ice of Greenland and Antarctica to melt, the sea level would rise at least 100 feet or more.
  - (D) If the ice of Greenland and Antarctica was melting, the sea level would rise at least 100 feet.
  - (E) Should the ice of Greenland and Antarctica melt, the sea level would rise at least 100 feet or more.
15. The Parthenon is larger than usual for a Doric temple, with eight columns on the short sides and seventeen on the long ones rather than the typical six and thirteen.
- (A) usual
  - (B) is usual
  - (C) has been usual
  - (D) one usually is
  - (E) it is usual

GO ON TO THE NEXT PAGE

16. Born Janet Miriam Taylor Caldwell near Manchester, England, on September 7, 1900, her family moved to the United States when the future author was six.
- (A) her family moved to the United States when the future author was six
  - (B) her family then moved, when the future author was six, to the United States
  - (C) her family, when the future author was six, then moved to the United States
  - (D) when the future author was age six, her family moved to the United States
  - (E) the future author moved with her family to the United States at age six
17. When deprived of carbohydrates, its preferred fuel, the body is forced to burn fats and protein for energy, thus causing the formation of fatigue-inducing toxins.
- (A) When deprived of carbohydrates, its preferred fuel, the body is forced to burn fats and protein for energy, thus causing
  - (B) When deprived of carbohydrates, which are the body's preferred fuel, it is thus forced to burn fats and protein for energy, which causes
  - (C) When deprived of its preferred fuel, which are carbohydrates, the body is forced to burn fats and protein for energy, and thus causes
  - (D) The body is forced to burn fats and protein for energy when deprived of carbohydrates, its preferred fuel, which thus causes
  - (E) The body's preferred fuel is carbohydrates, and when deprived of them it is thus forced to burn fats and protein for energy, causing
18. A "standard candle" is a light source whose intrinsic luminosity is so well known that the extent to which its brightness has been dimmed by distance can be used as an astronomical yardstick.
- (A) so well known that the extent to which its brightness has been dimmed by distance can
  - (B) so well known that the extent of its brightness that is dimmed by distance can
  - (C) sufficiently well known so that the extent that distance has dimmed its brightness can
  - (D) sufficiently well known for the extent of its brightness that has been dimmed by distance to
  - (E) sufficiently well known for the extent that distance has dimmed its brightness to
19. Unlike their close cousins the blue jays, which demonstrate raucous, aggressive, selfish, and very individualistic habits, the behavior of the Mexican jay has been found to be quiet, cooperative, communal, and even altruistic.
- (A) the behavior of the Mexican jay has been found to be
  - (B) the Mexican jay's behavior has been found
  - (C) it has been found that Mexican jays are
  - (D) Mexican jays have been found to be
  - (E) the Mexican jay has been found
20. A natural response of communities devastated by earthquake or flood is to rebuild on the same site, overlooking the possibility that the forces that caused it could be repeated.
- (A) overlooking the possibility that the forces that caused it could be repeated
  - (B) overlooking the possibility that the forces causing it could be repeated
  - (C) overlooking that the forces that caused the disaster could also cause another one
  - (D) without considering that the forces causing the disaster could be repeated
  - (E) without considering that the forces that caused the disaster could also cause another such disaster
21. Indoor air pollution can threaten the health of closely confined farm animals and the workers who tend them and perhaps as well impairs the quality of such farm products like eggs, poultry, and pork.
- (A) perhaps as well impairs the quality of such farm products like
  - (B) perhaps as well impairs the quality of such farm products as
  - (C) perhaps also impairs the quality of such farm products like
  - (D) may also impair the quality of such farm products like
  - (E) may also impair the quality of such farm products as

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22. Evidence of some shifts in the character of violence on television is emerging from a new study of 500 television programs by the Center for Media and Public Affairs, a nonprofit research center in Washington, D.C., a study that is underwritten by a number of educational institutions.
- (A) programs by the Center for Media and Public Affairs, a nonprofit research center in Washington, D.C., a study that is underwritten by a number of educational institutions
  - (B) programs by the Center for Media and Public Affairs, a nonprofit research center in Washington, D.C., and it is underwritten by a number of educational institutions
  - (C) programs underwritten by a number of educational institutions and conducted by the Center for Media and Public Affairs, a nonprofit research center based in Washington, D.C.
  - (D) programs, a study underwritten by a number of educational institutions and conducted by the Center for Media and Public Affairs, a nonprofit research center in Washington, D.C.
  - (E) programs, a study conducted by the Center for Media and Public Affairs, a nonprofit research center based in Washington, D.C., and it is underwritten by a number of educational institutions
23. Economists attribute declines in the prices of the industrial raw materials that the United States imports from developing countries to the strong dollar, high interest rates, and the austerity programs that Western banks and the International Monetary Fund have imposed on debtor nations.
- (A) declines in the prices of the industrial raw materials that the United States imports from developing countries to
  - (B) that declining prices for industrial raw materials imported by the United States from developing countries are the result of
  - (C) price declines for industrial raw materials that the United States imports from developing countries to be a consequence of
  - (D) that declines in the prices for the industrial raw materials that the United States imports from developing countries are due to
  - (E) that declines in the prices of the industrial raw materials imported from developing countries by the United States result from
24. Many women who might otherwise choose teaching as a career in the past are now going into business, government, and industry, areas where there are opportunities not previously available to them.
- (A) who might otherwise choose teaching as a career in the past
  - (B) who otherwise might once choose teaching as a career
  - (C) who might once have chosen teaching as a career
  - (D) who, in the past, might otherwise once have chosen teaching as a career
  - (E) who, as a career, might have chosen teaching in the past
25. In repoussé, a method of sculpture, workers lay copper sheets over wooden molds, and then, using a variety of exotic hammers, carefully pounding the metal into shape.
- (A) In repoussé, a method of sculpture, workers lay copper sheets over wooden molds, and then, using a variety of exotic hammers, carefully pounding the metal into shape.
  - (B) Repoussé is a method of sculpture in which workers lay copper sheets over wooden molds and then, using a variety of exotic hammers, carefully pound the metal into shape.
  - (C) Repoussé workers, who do a method of sculpture by laying copper sheets over wooden molds, use a variety of exotic hammers, and then pounding the metal into shape.
  - (D) Workers who lay copper sheets over wooden molds use a variety of exotic hammers and carefully pound the metal into shape in order to do repoussé, a method of sculpture.
  - (E) Laying copper sheets over wooden molds, and using a variety of exotic hammers in order to pound the metal into shape, repoussé is a method of sculpture done by workers.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

Practices for GMAT Book 1

SECTION 3

Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

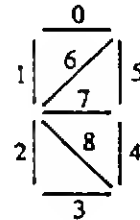
**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. Marie's monthly salary is determined by the formula  $s = 850 + \frac{x}{10}$ , where  $s$  is her salary and  $x$  is the total amount of her monthly sales, both expressed in dollars. If the total of Marie's sales for July was \$22,000, then her salary for July was

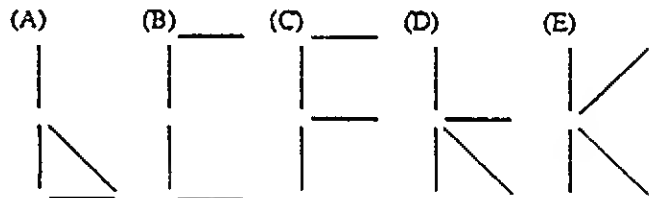
- (A) \$2,115  
(B) \$3,050  
(C) \$5,620  
(D) \$6,410  
(E) \$10,700

2. Of the following, which is closest to  $\frac{1}{7}$ ?

- (A) 0.200  
(B) 0.172  
(C) 0.167  
(D) 0.143  
(E) 0.140



3. The figure above shows the arrangement and code numbers of 9 fluorescent tubes. If a tube is illuminated whenever its code number is received, which of the following shows the arrangement of tubes illuminated when the digits in the result of  $3,804 \div 3$  are received?



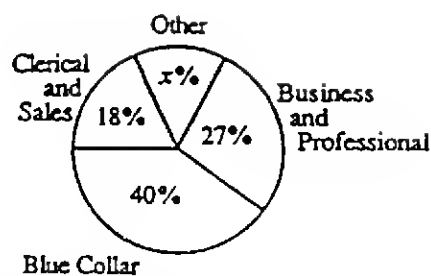
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4. On the first day of her vacation, Louisa traveled 216 miles. On the second day, traveling at the same average speed, she traveled 378 miles. If the 216-mile trip took 3 hours less than the 378-mile trip, what was the average speed, in miles per hour?

(A) 31  
(B) 38  
(C) 50  
(D) 54  
(E) 56

5. If  $x = \frac{1}{2}(\sqrt{2})^2$ , then  $x =$

(A)  $\frac{1}{2}$   
(B) 1  
(C) 2  
(D)  $\frac{\sqrt{2}}{4}$   
(E)  $\sqrt{2}$



6. The graph above shows the percent of the people in a certain survey who belonged to each of four occupational categories. Of those surveyed, if 160 were in blue-collar occupations, how many were in occupations classified as "Other"?

(A) 15  
(B) 24  
(C) 60  
(D) 70  
(E) 240

GO ON TO THE NEXT PAGE.



7. In 1965, total personal income for Country  $X$  was 10.5 billion dollars and total personal savings were 750 million dollars. Total personal savings were approximately what percent of total personal income? (1 billion = 1,000,000,000)

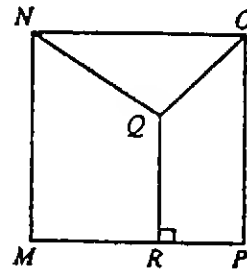
(A) 0.1%  
(B) 0.7%  
(C) 1.4%  
(D) 3.0%  
(E) 7.1%

8. If  $s = \frac{2}{5} + \frac{4}{10} + \frac{6}{15}$ , then  $(1 - s)^3 =$

(A)  $-\frac{1}{125}$   
(B)  $-\frac{1}{25}$   
(C)  $\frac{1}{25}$   
(D)  $\frac{27}{125}$   
(E)  $\frac{216}{125}$

9. An employee of Company  $X$  is entitled to a disability benefit equal to the sum of 60 percent of the first \$2,000 of monthly salary and 40 percent of the amount of monthly salary in excess of \$2,000. What is the monthly salary of an employee who receives \$1,400 in disability benefits under this plan

(A) \$1,700  
(B) \$2,200  
(C) \$2,240  
(D) \$2,500  
(E) \$3,000



10. In the figure above, if the area of square region  $MNOP$  is 64 and the length of  $QR$  is 5, what is the area of triangular region  $NOQ$ ?

(A) 10  
(B) 12  
(C) 20  
(D) 24  
(E) 40

GO ON TO THE NEXT PAGE

11. If  $(5 - 2x)^x = 1$  and  $x \neq 0$ , then  $x =$

- (A)  $-3$
- (B)  $-2$
- (C)  $2$
- (D)  $\frac{5}{2}$
- (E)  $3$

12. Pat bought  $n$  apples at a cost of 3 for \$0.20 and then sold the  $n$  apples at a price of 4 for \$0.35. If Pat's revenue from the sale of the apples was \$2.50 more than the cost of the apples, what is the value of  $n$ ?

- (A) 150
- (B) 120
- (C) 90
- (D) 80
- (E) 60



13. In the figure above, a circular hoop is rolling along a flat surface in a straight line. If point  $A$  touches the surface at 25-inch intervals, then the radius of the hoop is approximately

- (A) 8 in
- (B) 7 in
- (C) 6 in
- (D) 5 in
- (E) 4 in

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14. There are 125 chips on a table. If as many of the chips as possible are to be arranged into an equal number of 3-chip and 4-chip stacks and the remaining chips are to be removed, how many of the chips are to be removed?
- (A) One  
(B) Two  
(C) Five  
(D) Six  
(E) Seven
15. If the average (arithmetic mean) of  $a$ ,  $b$ , and  $c$  is 40, what is the average (arithmetic mean) of  $(3a + 10)$ ,  $(3b + 10)$ , and  $(3c + 10)$ ?
- (A) 50  
(B) 70  
(C) 130  
(D) 150  
(E) It cannot be determined from the information given.
16. An empty oil tanker was filled with oil at a uniform rate in  $t$  hours. What proportion of the tanker was filled during the first  $x$  hours if  $x < t$ ?
- (A)  $\frac{x}{t}$   
(B)  $\frac{t}{x}$   
(C)  $\frac{x}{t - x}$   
(D)  $\frac{t - x}{t}$   
(E)  $\frac{t - x}{x}$

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Year	Average Price
1980	\$7,500
1982	\$10,000
1984	\$11,000

17. The table above shows the average price of a new car sold in Country  $X$  during each of three years. If the average price of a new car sold in 1982 was  $x$  percent greater than the average price of a new car sold in 1980, and the average price of a new car sold in 1984 was  $y$  percent greater than the average price of a new car sold in 1982, then  $x$  is how much greater than  $y$ ?

- (A) 10  
(B)  $13\frac{1}{3}$   
(C)  $23\frac{1}{3}$   
(D)  $33\frac{1}{3}$   
(E)  $46\frac{2}{3}$

18. Which of the following must be true?

- I. If  $a + b < a + c$ , then  $b < c$ .  
II. If  $a^2b < a^2c$ , then  $b < c$ .  
III. If  $b^2 < c^2$ , then  $b < c$ .

- (A) None  
(B) I only  
(C) II only  
(D) I and II only  
(E) I, II, and III

19. Bell  $X$  rings once every 12 minutes, bell  $Y$  once every 14 minutes, and bell  $Z$  once every 15 minutes. If, during a given day, the three bells ring at exactly the same instant, how many minutes will elapse before the three bells next ring simultaneously?

- (A) 60  
(B) 210  
(C) 420  
(D) 840  
(E) 2,520

20. An integer  $n$  that is greater than 1 is said to be "prime-saturated" if it has no prime factor greater than or equal to  $\sqrt{n}$ . Which of the following integers is prime-saturated?

- (A) 6  
(B) 35  
(C) 46  
(D) 66  
(E)  $7^5$

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 4

Time—30 minutes

20 Questions

**Directions:** For each question in this section, select the best of the answer choices given.

1. In order to reverse a downward trend in occupancy rates, many hospitals are now turning to advertising and are also offering, for an extra fee, new amenities such as gourmet meals, luxury rooms, and valet parking.

Which of the following, if it were the reason that the beds in the hospitals involved were being left empty, would increase the likelihood that the marketing techniques mentioned above would be effective?

- (A) The population of the areas around the hospitals is generally healthier than in the past.
  - (B) Hospital costs are prohibitively high for many people.
  - (C) Patients have been choosing other hospitals offering better amenities than those previously available in the hospitals involved.
  - (D) Many medical procedures that once required hospitalization are now done in doctors' offices or in clinics with limited facilities.
  - (E) The hospitals involved do not offer important medical services that are available elsewhere.
2. Corporations exist to make money for their shareholders. Corporations have no money to give away because any excess funds belong to the shareholders. Therefore, corporations should not contribute to charities.
- Which of the following most seriously weakens the reasoning in the argument above?
- (A) Managers are being trained to consider the ethical, moral, and social effects of their decisions in addition to the economic factors.
  - (B) Some of the largest corporations in the country are known to be major contributors to philanthropic organizations.
  - (C) Shareholders tend to make larger individual donations to charities than do people who hold no shares in corporations.
  - (D) Most corporations contribute solely to large, well-known, and highly organized charitable organizations rather than to individuals in need.
  - (E) The favorable publicity and tax advantages gained by corporate charity often result in an increase in profits greater than the actual costs of making the donations.

3. For large farms to be as productive as they can be, their owners need to invest heavily in expensive machinery. This typically requires them to go into considerable debt, and interest on this debt is then a significant fixed cost. This high fixed cost makes those farmers vulnerable to operating losses if the prices of their products drop.

The information above best supports which of the following inferences about large farms?

- (A) They can be highly productive without being profitable.
- (B) They tend to be so highly productive that they drive down market prices.
- (C) They tend to be consistently profitable if their owners borrow at low interest rates.
- (D) They respond to operating losses by increasing their productivity.
- (E) They cannot be profitable if their owners depend on credit.

GO ON TO THE NEXT PAGE.

4. Calcium consumed in recommended levels is stored by bones and so helps increase bone mass, especially for teen-agers. Beginning at age 35, the stored calcium is used without being replenished. The more bone mass an individual has, the less likely it is that the individual will develop osteoporosis, a disease that makes bones brittle, especially in people over age 50.

Which of the following is a conclusion that can be properly drawn from the statements above?

- (A) People who steadily increase the amount of calcium they consume from age 35 on are less likely to suffer osteoporosis than are people who do not steadily increase the amount of calcium they consume from age 35 on.
- (B) People should steadily increase the amount of calcium they consume from ages 35 to 50 to prevent osteoporosis.
- (C) People who consume the recommended levels of calcium during their teen years are less likely to suffer osteoporosis than are people who increase their consumption of calcium to the recommended levels between the ages of 35 and 50.
- (D) People who are at least 50 years old and who suffer from osteoporosis can be cured by immediately increasing the amount of calcium they consume.
- (E) People who are at least 50 years old and who suffer from osteoporosis did not consume calcium when they were teen-agers.

5. The people who are most at risk of contracting a particular type of influenza are those who have never previously contracted that type of influenza and have never been vaccinated for it. Cases of type A influenza have been recently diagnosed again in the United States. Type A influenza was last found in the United States in 1950.

Which of the following groups of people have the LEAST risk of contracting type A influenza?

- (A) People who were not vaccinated for any type of influenza in 1950 and did not contract any type of influenza
- (B) People who have previously contracted a different type of influenza, but not type A
- (C) People who were vaccinated for a different type of influenza in 1950, but not for type A
- (D) People who had type A influenza in 1950, but were not vaccinated for it
- (E) People born after 1950 who were exposed to different types of influenza, but who never contracted any type of influenza

6. Even those buildings made of the best of materials are being sloppily designed and constructed today. But many flaws that are already part of the construction are made into bigger and more costly problems by maintenance personnel or other engineers because they do not take the time to study the buildings for which they become responsible.

Which of the following, if it could be carried out, is most likely to alleviate the difficulties stated in the passage?

- (A) Buildings are made only of more costly materials that have passed all safety requirements.
- (B) Maintenance personnel inform the tenants in their buildings about any repairs that are needed.
- (C) Engineers who were not responsible for the original construction of a building supervise any structural improvements in the building.
- (D) The design engineer oversees the maintenance of his or her creation after construction is ended and the building is occupied.
- (E) The plans of a design engineer are made available for the scrutiny of the tenants of the building the engineer designed.

7. Tropical forests produce a large percentage of the Earth's supply of oxygen. Continued destruction of these forests is likely to reduce the Earth's oxygen supply to levels that will threaten the existence of all oxygen-dependent life on Earth.

Which of the following, if true, most seriously weakens the prediction above?

- (A) All of the oxygen produced by the Earth's tropical forests is consumed by bacteria and animals living in those forests.
- (B) Some of the oxygen produced by the Earth's tropical forests escapes through the upper atmosphere without being consumed.
- (C) The oxygen produced by tropical forests is consumed by animals all over the Earth.
- (D) The Earth's tropical forests are being destroyed at a rate of hundreds of acres every day.
- (E) Tropical forests contain the most diverse selection of oxygen-dependent animals on the Earth.

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8. The link between cigarette advertising and increased cigarette consumption is tenuous at best. In Italy, for instance, where cigarette advertising is prohibited, cigarette consumption among teen-agers has continued to rise.

Which of the following, if true, would most seriously weaken the argument above?

- (A) Most Italian teen-agers are aware of the debilitating effect that cigarette smoking has on a person's health.
  - (B) Most Italian teen-agers watch television channels that broadcast from countries where cigarette advertising is legal.
  - (C) Most Italian teen-agers who smoke cigarettes have at least one parent who also smokes cigarettes.
  - (D) Italian teen-agers who smoke cigarettes regularly tend to miss more days of school than those who do not smoke.
  - (E) Italian teen-agers tend to respond more strongly to advertising than do teen-agers in other European countries.
9. Corporate management's increasing neglect of long-term growth is a result of pressures brought by investors holding large blocks of stock in a corporation who want to see concentration on long-term growth sacrificed in order to increase stock value over the short term.

Which of the following, if true and known to all investors, would most seriously weaken the explanation above?

- (A) Investors who hold large blocks of stock tend to sell whenever the stock's value drops.
- (B) Investors who hold large blocks of stock in a corporation often have direct access to that corporation's top management.
- (C) A corporation's stock decreases in value when the corporation's short-term growth prospects are poor.
- (D) A corporation's stock increases in value when investors buy large amounts of it.
- (E) A corporation's stock increases in value over the short term only when the corporation's long-term growth prospects are good.

10. Injections of bovine growth hormone, which is normally produced in small amounts by a cow's pituitary gland, have been shown to increase milk production in cows from ten to forty percent with only a modest increase of feed. The United States Food and Drug Administration (FDA) plans to consider licensing commercial producers of the hormone.

Which of the following, if true, would provide the strongest criticism of the FDA's plan?

- (A) Increased milk production increases the susceptibility of cows to a variety of diseases.
- (B) The FDA intends to employ stringent requirements when issuing permits for producing bovine growth hormone.
- (C) The chemical companies that will be producing the hormone will obtain large short-term profits.
- (D) Bovine growth hormone will not hurt the chances for survival of the family dairy farm, which typically has about fifty cows.
- (E) Many small dairy farms are going out of business because they cannot charge prices high enough to cover their costs.

11. Studies show that treatment of stress-related disorders with psychotherapy can dramatically cut a person's need for medical treatment for those disorders. Insurance companies could, therefore, lower their costs by subsidizing psychotherapy and thereby encouraging people who have stress-related disorders and are not now using psychotherapy to do so.

The plan above depends on the assumption that

- (A) people who have stress-related disorders tend to have little faith in psychotherapy
- (B) any person with a stress-related disorder can be effectively treated with psychotherapy
- (C) the projected cost to insurance companies of medical treatment for stress-related disorders exceeds the cost of the proposed subsidies for psychotherapy for those disorders
- (D) any stress-related disorder that cannot be treated effectively with conventional medical treatment can be treated effectively with psychotherapy
- (E) few people who have medical insurance are treated for stress-related disorders

GO ON TO THE NEXT PAGE.

12. Businesses that are successful in a competitive market must be well managed. If they were not well managed, then they would not have been successful.

Which of the following most closely parallels the type of reasoning used in the argument above?

- (A) There must be rain to maintain water levels in the reservoirs. If there are no clouds, then there will be no rain.
- (B) A scientific theory should be able to generate predictions. If the predictions made by a theory were consistently right, then the theory would be good.
- (C) It must be true that drivers that are in automobile accidents are incompetent drivers. If they were not incompetent, they would not have been in accidents.
- (D) Given the poor record of survival of new products, there is great risk in being an innovator. If they compete in the same market, imitators are often more successful than innovators.
- (E) The advance of technology affects all products eventually. If a company ignores technological advances, it may not be competitive in the future.

13. An investigator divided 84 adults into two distinct groups (low and high consumption), based on each person's daily caffeine consumption. A significantly larger percentage of the high-consumption group than of the low-consumption group demonstrated a high level of anxiety. The investigator concluded that it was greater caffeine consumption that resulted in higher anxiety.

Which of the following, if true, most seriously weakens the conclusion above?

- (A) Some subjects in the high-consumption group experienced lower levels of anxiety than did other subjects in the high-consumption group.
- (B) Some subjects in the low-consumption group did not experience any anxiety.
- (C) High levels of anxiety when consuming large amounts of caffeine were the reason some subjects restricted their intake of caffeine.
- (D) Some subjects consumed caffeine by drinking coffee and tea, but others consumed caffeine by taking medication that contained caffeine.
- (E) High levels of anxiety caused some subjects to consume large amounts of caffeine.

14. The numbers of retired people will grow as the population becomes older, and their political power will expand even faster than their numbers.

Which of the following, if true, LEAST supports the statement about the growth of the political power of retirees?

- (A) Those retired people who had supported political parties while they were in the work force are more likely to support parties after retirement than are those retired people who had not done so previously.
- (B) Retired people devote more time to political activities than do members of the work force.
- (C) The adult children of retired people tend to vote in ways that support the interests of their parents even though such actions may not be in the children's own economic interest.
- (D) Retired people are more likely to vote than are members of the work force.
- (E) More retired people than working people belong to associations that mobilize their members to take action concerning political issues that may affect them.

15. While a quota on imported cars might protect jobs in the domestic automobile industry, it also means fewer inexpensive imported cars and less money for those buying cars to spend on other things. Therefore, such a quota will ultimately result in fewer jobs in domestic industries unrelated to the automobile industry than there would be without a quota.

Which of the following is an assumption made in drawing the conclusion above?

- (A) The number of car purchases will decrease if a quota is imposed on imported cars.
- (B) Most car buyers prefer inexpensive imported cars to inexpensive domestic cars.
- (C) Without a quota, money that car buyers would save by buying inexpensive imported cars would be spent on goods produced by unrelated domestic industries.
- (D) With a quota, the domestic automobile industry will employ more people than it currently does.
- (E) A quota on imported cars would cause the price of particular models of imported cars to rise.

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16. Pharmaceutical companies spend more than ever on research and development; yet the number of new drugs patented each year has dropped since 1963. At the same time, profits—at constant 1963 dollars—for the industry as a whole have been steadily increasing.

Which of the following, if true, is the single factor most likely to explain, at least in part, the three trends mentioned above for money spent, drugs patented, and profits made?

- (A) Government regulations concerning testing requirements for novel drugs have become steadily more stringent.
- (B) Research competition among pharmaceutical companies has steadily intensified as a result of a general narrowing of research targets to drugs for which there is a large market.
- (C) Many pharmaceutical companies have entered into collaborative projects with leading universities, while others have hired faculty members away from universities by offering very generous salaries.
- (D) The number of cases in which one company's researchers duplicated work done by another company's researchers has steadily grown.
- (E) The advertising budgets of the major pharmaceutical companies have grown at a higher rate than their profits have.

17. W: The rapid rise in the rate of unemployment is a serious economic problem; it will undoubtedly cost the majority party votes in the coming election.

Z: I disagree. Statistics for the past 40 years show that there is no significant relationship between the prevailing level of unemployment and political gains or losses by the party that happens to be in the majority at election time.

Which of the following most seriously weakens the force of Z's counterargument?

- (A) Z fails to cite any actual figures.
- (B) Z's decision to consider a time span of 40 years seems arbitrary.
- (C) Z relies on conventional criteria for the notion of a significant relationship.
- (D) Z's statistics focus on level of unemployment, rather than direction of change.
- (E) Z assumes that there is no connection between economic and political trends.

18. The cost of flood damage since 1980 has been greater in areas that have adopted flood-control measures than in those that have not. Thus, flood-control projects are expensive engineering mistakes and a substantial waste of resources.

Which of the following, if true, would be most damaging to the argument above?

- (A) Those areas that had not suffered flood damage before 1980 are the only ones that have not adopted flood-control measures.
- (B) Since 1980, those areas that have taken flood-control measures have suffered greater flood damage than they did in the previous decade.
- (C) The cost of flood damage has increased every year since 1980.
- (D) Faulty engineering has not been the only cause of the failure of flood-control projects.
- (E) The amount of rainfall since 1980 has been substantially greater than normal.

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19. It often happens that, as a recession deepens, the stock market soars. Later, after the economy has become stronger, the market often appears to become shaky. For these reasons, many have concluded that the market is a poor indicator of economic trends.

20.

NOT SCORED

Which of the following, if true, best counters the argument presented above?

- (A) Stock prices do not reflect the current state of the economy, but rather the expert judgment of investors about the future strength of the economy.
- (B) Brokers and analysts say that stock prices are sometimes inconsistent when business is beginning to emerge from a slump.
- (C) The crash of the stock market in 1929 preceded a prolonged and severe depression.
- (D) Economists note that sharp gains in the stock market have sometimes been recorded in the worst months of a recession.
- (E) Some brokers and analysts believe that the stock market is a useful index of economic trends because it is updated more frequently than other indicators.

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

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## Practices for GMAT Book 1

### SECTION 5

Time—30 minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to fill in the corresponding oval

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

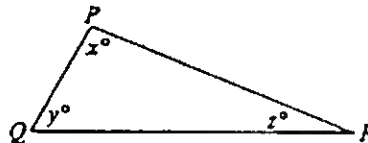
You may assume that the position of points, angles, regions, etc., exist in the order shown.

All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

- (1)  $PQ = PR$
- (2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

1. What is the area of rectangular region  $R$ ?

- (1) The length of  $R$  is 24.
- (2) The ratio of the length of  $R$  to the width of  $R$  is 3 : 2.

2. If  $x + y + z = 360$ , is  $x$  equal to 120?

- (1)  $y + z = 240$
- (2)  $x = y = z$

3. If  $y = x^2 + kx + 16$ , what is the value of  $x$ ?

- (1)  $y = 0$
- (2)  $k = 8$

4. What is the value of the ratio of  $x$  to  $y$ ?

- (1)  $xy = 16$
- (2) The ratio of  $2x$  to  $3y$  is 6 to 9.

5. When three dice were rolled, what was the sum of the three numbers that came up?

- (1) The sum of two of the numbers that came up was equal to the third number that came up.
- (2) Two of the numbers that came up were equal.

GO ON TO THE NEXT PAGE.

Practices for GMAT Book 1

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- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

6. What is the cost per ounce of the soda in a certain carton?

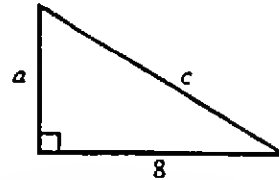
- (1) The carton of soda costs \$2.40.
- (2) The carton contains 6 bottles of soda.

7. If an aquarium, which has the shape of a rectangular solid, is  $\frac{2}{3}$  full of water, then its volume is how many cubic feet?

- (1) The area of the base of the aquarium is 4.5 square feet.
- (2) The amount of water in the aquarium is 6 cubic feet.

8. In a certain school, if the current student enrollment of 600 were to increase to 660, then the number of teachers on staff would have to be increased by how many in order to maintain the current ratio of students to teachers on staff?

- (1) The current ratio of students to teachers on staff is 30 to 1.
- (2) The current number of teachers on staff is 20.



9. In the right triangle above, is  $c$  greater than 10?

- (1)  $a > 6$
- (2)  $c < 12$

10. If two students are selected at random, one from the seventh grade and one from the eighth grade, which of the two is more likely to be a girl?

- (1) There are exactly 10 girls in the seventh grade and 12 girls in the eighth grade.
- (2) There are exactly 10 boys in the seventh grade and 20 boys in the eighth grade.

GO ON TO THE NEXT PAGE.

*Practices for GMAT Book 1*

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

11. If  $r$  and  $s$  are positive,  $r$  is what percent of  $s$ ?
- (1)  $s$  is 250 percent of  $r$ .
  - (2)  $r = 0.4s$
12. In a four-volume set of books, how many pages does volume I contain?
- (1) The four volumes contain a total of 840 pages.
  - (2) Volumes II, III, and IV collectively contain 300 pages more than volume I contains.
13. All of the seats in a lecture hall are arranged in 15 rows. After the front row, each row has one more seat than the row in front of it. How many seats are in the 8th row from the front?
- (1) The lecture hall has a total of 285 seats.
  - (2) The last row in the back has 26 seats.
14. In year  $X$  what percent of the 90 million jobs provided by corporations in the United States were provided by the 1,000 largest corporations in the United States?
- (1) In year  $X$  these 1,000 largest corporations provided an average (arithmetic mean) of 18,000 jobs per corporation.
  - (2) In year  $X$  the number of jobs provided by corporations in the United States that were not among the 1,000 largest corporations in the United States was 4 times as great as the number provided by these 1,000 largest corporations.
15. If  $r$  and  $s$  are positive integers, is  $2r + s$  even?
- (1)  $r$  is even.
  - (2)  $s$  is even.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

16. If  $x$  is an integer, what is the units' digit of  $x^4$ ?

- (1)  $x$  is odd.
- (2)  $x$  is not divisible by 9.

17. If  $m$  and  $k$  are positive integers and  $z \times 10^k = 6 \times 10^m$ , what is the value of  $z$ ?

- (1)  $m = k + 2$
- (2)  $z > 100$

18. The  $x$  boys and  $y$  girls in a certain class took a mathematics test. Was the average (arithmetic mean) score of the  $x$  boys greater than 83?

- (1) The sum of all the scores on the test was  $85(x + y)$ .
- (2) The average (arithmetic mean) score of the  $y$  girls was 86.

19. Is  $k$  the square of an integer?

- (1)  $k = r^2q^6r^{10}$ , where  $r$ ,  $q$ , and  $r$  are integers.
- (2)  $k = r^2m^{15}$ , where  $r$  and  $m$  are integers.

20. In a bakery that sells one kind of roll and one kind of tart, the price of 3 rolls and 4 tarts is equal to the price of 11 rolls and 3 tarts. If the unit prices do not vary with the quantities purchased, what is the price of one tart in this bakery?

- (1) The price of one tart and one roll together is \$0.90.
- (2) The price of a dozen rolls is \$1.20.

**GO ON TO THE NEXT PAGE.**

**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

21. If  $x$ ,  $y$ , and  $z$  are positive, does  $x + y + z = 3$ ?

- (1)  $xy = 1$
- (2)  $yz = 1$

22. Is  $k$  greater than 3?

- (1)  $(k - 3)(k - 2)(k - 1) > 0$
- (2)  $k > 1$

23. Does  $ab = a^2$ ?

- (1)  $a^2 = b^2$
- (2)  $a^3 = b^3$

24. Of the numbers  $q$ ,  $r$ ,  $s$ , and  $t$ , which is greatest?

- (1) The average (arithmetic mean) of  $q$  and  $r$  is  $s$ .
- (2) The sum of  $q$  and  $r$  is  $t$ .

25. What is the value of  $x$ ?

- (1)  $x^3 - x^2 = 0$
- (2)  $(-x)^2 = -x^2$

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



## Practices for GMAT Book 1

### SECTION 6

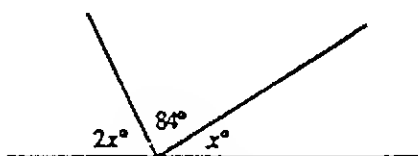
Time—30 minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.



1. In the figure above, what is the value of  $x$ ?

(A) 28  
(B) 30  
(C) 32  
(D) 42  
(E) 48

2. In 1984 the production costs of Company  $X$  totaled \$719,000 and nonproduction costs totaled \$15,000. In 1985 robots were introduced, and production costs dropped to \$600,000, but nonproduction costs rose to \$65,000 for the year. What was the decrease in total costs for Company  $X$  from 1984 to 1985?

(A) \$50,000  
(B) \$69,000  
(C) \$119,000  
(D) \$134,000  
(E) \$169,000

3. The product of two positive integers  $m$  and  $n$  is twice their sum. If  $n$  is 6, what is the value of  $m$ ?

(A) 8  
(B) 6  
(C) 4  
(D) 3  
(E) 2

4. If  $\frac{2(x - 4)}{5} = 20$ , then  $x =$

(A) 46  
(B) 48  
(C) 50  
(D) 52  
(E) 54

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5. If  $n$  is an integer and  $0.50236 \times 10^n$  is equal to approximately 500, then  $n =$
- (A) -3  
(B) -2  
(C) 2  
(D) 3  
(E) 4
6.  $\sqrt{0.0016} =$
- (A) 0.08  
(B) 0.04  
(C) 0.004  
(D) 0.0008  
(E) 0.0004
7. Lou and Selma were hired to paint a room for a total of \$72. They completed the job with Lou working 3 hours and 20 minutes and Selma working 2 hours and 40 minutes. If they decided to split the \$72 in proportion to the amount of time each spent on the job, how much did Lou receive?
- (A) \$32.00  
(B) \$36.00  
(C) \$40.00  
(D) \$41.14  
(E) \$43.20
8. The total cost of 3 pounds of hamburger and 4 pounds of hot dogs is \$12.39. At the same rates, if the cost of 5 pounds of hamburger is \$9.45, what is the cost per pound of hot dogs?
- (A) \$1.59  
(B) \$1.68  
(C) \$1.77  
(D) \$1.89  
(E) \$2.03
9. An inlet pipe can fill an empty pool with water in 3 hours, and the pool's outlet pipe can empty a full pool in 4 hours. The water flows at constant rates through both pipes regardless of the water level in the pool. If both pipes were inadvertently left open, what fraction of the pool would be filled exactly 2 hours after water began to flow into the empty pool?
- (A)  $\frac{1}{12}$   
(B)  $\frac{1}{6}$   
(C)  $\frac{1}{4}$   
(D)  $\frac{1}{3}$   
(E)  $\frac{1}{2}$
10. To fill a fruit basket, Lee spent \$8.40 for fruit that included apples, peaches, oranges, and bananas. If the cost of the oranges alone was equal to the total cost of the apples and peaches combined, and the cost of the bananas was \$1.80, what was the cost of the peaches?
- (A) \$1.65  
(B) \$2.20  
(C) \$2.40  
(D) \$3.30  
(E) It cannot be determined from the information given.

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11. 
$$\frac{\frac{0}{-10} + \frac{-25}{5}}{\frac{-12}{-4} - (-2)}$$

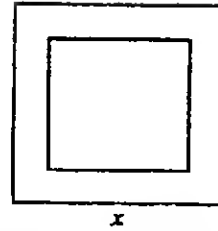
- (A) 5
- (B) 1
- (C)  $-\frac{5}{6}$
- (D) -1
- (E) -5

12. Of the following, the closest approximation to  $\frac{8.097(0.8745)}{0.202}$  is

- (A) 40
- (B) 35
- (C) 30
- (D) 4
- (E) 3

13. If  $0 < n < 1$ , which of the following must be greater than 1?

- (A)  $\frac{3n}{2}$
- (B)  $\frac{n}{1-n}$
- (C)  $\frac{n}{n^2+1}$
- (D)  $\frac{1}{1+n}$
- (E)  $\frac{3}{n+2}$



Note: Not drawn to scale.

14. The figure above represents a square plot measuring  $x$  feet on a side. The plot consists of a rectangular garden, 48 square feet in area, surrounded by a walk that is 3 feet wide on two opposite sides and 2 feet wide on the other two sides. What is the value of  $x$

- (A) 8
- (B) 10
- (C) 12
- (D) 16
- (E) 18

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15. Governor  $M$  vetoed 384 bills during 8 years in office and Governor  $Q$  vetoed 650 bills during 13 years in office. The average (arithmetic mean) number of bills vetoed per year by  $M$  was what percent greater than the average number of bills vetoed per year by  $Q$ ?
- (A) 10%  
(B) 11%  
(C) 32%  
(D) 46%  
(E) 67%
16. In a certain country 55 percent of the women are in the labor force and these women comprise 40 percent of the labor force. If the number of men in the labor force is 75 million, how many million women are in the labor force?
- (A) 50.00  
(B) 56.25  
(C) 68.75  
(D) 112.50  
(E) 125.00
17. A cylindrical can has a radius of 4 centimeters and a height of 12 centimeters. What is the area, in square centimeters, of a rectangular label that completely covers the curved surface of the can without overlapping?
- (A)  $16\pi$   
(B)  $64\pi$   
(C)  $96\pi$   
(D)  $192\pi$   
(E)  $576\pi$
18. The operation  $\#$  is defined by the equation  $x \# y = \frac{x - y}{2x - y}$ , where  $2x \neq y$ . The value of which of the following is 0?
- (A)  $-2 \# 2$   
(B)  $2 \# -2$   
(C)  $2 \# 2$   
(D)  $2 \# 1$   
(E)  $3 \# 2$

GO ON TO THE NEXT PAGE.

19. The cost of item  $A$  is  $\frac{y}{2}$  each and the cost of item  $B$  is  $\frac{t}{3}$  each. What is the average (arithmetic mean) cost per unit of a collection consisting of  $x$  units of  $A$  and  $k$  units of  $B$ ?
- (A)  $\frac{3y + 2t}{12}$   
 (B)  $\frac{(x + k) + (3y + 2t)}{12}$   
 (C)  $\frac{3xy + 2kt}{x + k}$   
 (D)  $\frac{3xy + 2kt}{6}$   
 (E)  $\frac{3xy + 2kt}{6(x + k)}$
20. One-fourth of a solution that was 10 percent sugar by weight was replaced by a second solution, resulting in a solution that was 16 percent sugar by weight. The second solution was what percent sugar by weight?
- (A) 34%  
 (B) 24%  
 (C) 22%  
 (D) 18%  
 (E) 8.5%

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

SECTION 7

Time—30 minutes

25 Questions

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and fill in the corresponding oval on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

In spite of early doubts, it is now well established that large reservoirs can generate earthquakes. When the possibility of reservoir-induced seismicity was first suggested during the mid-1960's, it was greeted with skepticism in some quarters, largely because detailed records of the prereservoir seismic background were incomplete at best. A scientifically rigorous examination of the evidence was therefore impossible.

But now there are no doubts, for well-documented examples of reservoir-induced seismicity are known throughout the inhabited continents. In general terms, what happens is that the huge mass of water in a reservoir changes the stress patterns in the underlying rocks. The water load exerts a simple vertical pressure on the rocks immediately, while the pore pressure in the rocks increases gradually as the water infiltrates at a rate that depends on their permeability and prior water content.

One such example is the Nurek reservoir in the Soviet Union, which has been generating seismic activity since filling began in the early 1970's. In this case, the timing of the induced seismicity is directly related not to the absolute amount of water present but to variations in that amount. Bursts of seismic activity are triggered when the water level changes, with the frequency of the activity increasing as the rate of level change increases.

The spatial distribution of the seismic activity at Nurek is less straightforward. Most of the induced earthquakes occur beneath the central part of the reservoir and upstream from it. The region containing that half of the reservoir immediately behind the dam, on the other hand, is almost completely aseismic. Yet both the seismic and aseismic zones are lithologically similar, consisting largely of shallow-water limestones, which are highly fractured and thus relatively permeable, interbedded with mixed components of low-permeability shale and gypsum. What, then, governs the location of the induced seismicity?

The answer lies in the varying structures of the rock strata and the different permeabilities such structures engender. Immediately upstream from the dam the alternating layers of limestone and gypsum-shale are folded into a V-shape (syncline). Any water entering one of the permeable layers could migrate to the bottom of the basin formed by that layer, but would be prevented from moving any further downward by the impermeable rock layer beneath. In this region, therefore, water cannot enter the vast mass of rock below and cannot thereby change the pore pressure. The water in the reservoir here acts only as a load and thus is insufficient to induce seismicity.

Further upstream from the dam, on the other hand, the strata are folded into an inverted V-shape (anticline). In this region water entering a permeable layer can diffuse along it and thus be carried to various depths without restriction. Here the pore pressure at given depths does change when the water level fluctuates, and this is sufficient to generate seismicity.

1. The passage suggests that the author would regard which of the following as most important for a "scientifically rigorous examination" (line 7) of the hypothesis that large reservoirs can induce earthquakes?

- (A) Systematic surveys of seismic activity under a reservoir after filling began
- (B) Detailed geological maps of the composition of rock strata underlying a reservoir
- (C) Comparable records of seismic activity in the area of a reservoir prior to and after construction and filling of the reservoir
- (D) Precise calculation of the amount of vertical pressure exerted by the reservoir's water load
- (E) Accurate records of the rate of increase in pore pressure in the rock strata underlying the reservoir

2. According to the passage, earthquake activity in the area of the Nurek reservoir is most frequent when the

- (A) reservoir is filled to capacity
- (B) water level in the reservoir is exceptionally low
- (C) reservoir is subjected to sudden drops in temperature
- (D) water level in the reservoir fluctuates
- (E) water level of the reservoir area behind the dam remains constant

GO ON TO THE NEXT PAGE.

3. According to the passage, which of the following proves that earthquake activity in the area of the Nurek reservoir cannot be accounted for exclusively by the composition of the rock strata underlying the reservoir?
- (A) There are two kinds of rock underlying the reservoir, but only the shallow-water limestones are permeable.
  - (B) The same rock strata underlie the whole reservoir area, but only one part of the area is subject to earthquake activity.
  - (C) The earthquake activity in the area is evenly distributed between the regions behind the dam and the central portion of the reservoir.
  - (D) The vertical load exerted by the water in the reservoir has different effects on shallow-water limestones than on mixed shale and gypsum.
  - (E) When the frequency of earthquake activity increases, the locations of such activity become more diffuse.
4. Which of the following best describes the organization of the passage?
- (A) An assertion is made, briefly explained, and then an illustrative example is examined in detail.
  - (B) A hypothesis is advanced, carefully qualified, and then supporting data are presented.
  - (C) A scientific dispute is introduced and the case for one side is analyzed and illustrated.
  - (D) A generally accepted principle is stated in order to introduce a detailed examination of a case that violates the principle.
  - (E) A theory is explained and a recent example that makes the theory obsolete is presented.
5. Which of the following sets of causes and effects most closely parallels reservoir-induced seismicity as it is described in the passage?
- (A) Environmental stresses in an area combine to produce an effect; the introduction of an artifact to that area restructures the stresses and reduces the incidence of the effect.
  - (B) An artifact is introduced into a stable environment; the environmental effects of that artifact cannot be separated from general environmental changes.
  - (C) An artifact is introduced into an environment; local conditions peculiar to that environment have little impact on the effects generally produced by such artifacts.
  - (D) An artifact creates certain initial effects on its environment; these environmental effects are gradually mitigated by environmental adaptation to the artifact.
  - (E) An artifact is introduced into an environment; the artifact generates spatially uniform stress but the environment responds differentially to that stress.
6. Which of the following best describes the interaction of water and rock strata in the region of the anticline under the Nurek reservoir?
- (A) Shale and gypsum form the top layer of rock in an anticline and thus the water cannot penetrate to the permeable limestone layer.
  - (B) Fractured and highly permeable limestone forms a basin in an anticline through which water penetrates to the rock below.
  - (C) The shale and gypsum layer beneath the permeable limestone basin in an anticline prevents water from penetrating to deeper rock strata.
  - (D) The shape of an anticline allows water to travel along the permeable layer and penetrate into deep rock strata.
  - (E) The structure of limestone strata alternating with shale and gypsum strata in an anticline allows the region to collect and hold water, thus increasing the load on the rocks below.

GO ON TO THE NEXT PAGE.

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7. It can be inferred from the passage that an accurate prediction of reservoir-induced earthquake activity at the site of the Nurek reservoir prior to its construction would have required all of the following data EXCEPT
  - (A) a general geological survey of the area, establishing the lithological composition of the rock strata
  - (B) a detailed examination of the structure of the rock strata underlying the site of the reservoir
  - (C) a projection of the number and magnitude of the fluctuations in the level of the water in the reservoir
  - (D) an estimate of the load that would be created by the total mass of water in the reservoir
  - (E) a determination of the chemical properties of the water that would be used to fill the reservoir
8. The passage implies that which of the following would be true in the area of the Nurek reservoir if the rate of change in the water level in the reservoir were very gradual?
  - (A) Stress patterns in the rock strata beneath the reservoir would be the same as before its construction.
  - (B) The seismic activity beneath the reservoir would not be very frequent.
  - (C) The spatial distribution of seismic activity beneath the reservoir would be altered.
  - (D) The rate of infiltration into rock strata below the reservoir would increase.
  - (E) The stress patterns in the rocks underlying the reservoir would be less affected by vertical load.
9. The author of the passage is primarily concerned with
  - (A) advancing a theory
  - (B) resolving a dispute
  - (C) explaining a relationship
  - (D) correcting an oversimplification
  - (E) reinterpreting data

GO ON TO THE NEXT PAGE.



The decline of the United States smokestack industries, reflected in their failure to compete successfully in domestic and world markets against foreign manufacturers, coupled with the more recent decline in the competitiveness of domestic high-tech firms, raises an important question. Can American productivity and consequent competitiveness be restored?

In his book *The Spirit of Enterprise*, George Gilder argues that dazzling entrepreneurship will restore American competitiveness in world markets. For Gilder, government intervention in the form of a national industrial policy is pure folly, and unfettered capitalism—and the innovation it fosters—is the only sure path to productivity.

While entrepreneurship is necessary in any productive economy, it is not sufficient. In this book, Gilder once again offers us his standard prescription for our nation's economic ills, a prescription that remains as unidimensional as ever. Gilder's diagnosis unfolds as follows.

Taxes are so high that business is discouraged from establishing itself in communities in the United States. Needless regulation is strangling America's entrepreneurs. And American labor is simply pricing itself out of the market.

Yet virtually all the relevant research finds that taxes are a relatively minor consideration in business location decisions. Furthermore, tax incentives to lure industry amount to little more than piracy among competing communities. Even when businesses relocate to a community offering such incentives, the same jobs are merely moved from one place to another, with no net increase in job creation or economic growth. The second scapegoat, government regulation, has simply gotten bad press. Undoubtedly, there are some regulations in effect whose benefits do not justify the costs. But they do not include the nation's civil rights laws, environmental and occupational safety regulations, collective bargaining rights, and other regulations that protect many of the fundamental benefits to which we have rightly become accustomed. Yet these are precisely the areas where the campaign for deregulation has been most vicious. Finally, reducing workers' wages will result in insufficient demand for the autos, homes, washing machines, and other goods whose production keeps our economy healthy.

Gilder and many other conservatives ridicule the concept of industrial policy. It is evident, however, that the United States has, and will continue to have (Gilder notwithstanding), a set of industrial policies (e.g., tax and trade policies, antitrust laws, research and development programs). So the question is not whether there should be an industrial policy. Rather, the issue is whether we will develop a set of explicit and coordinated policies to strengthen our domestic economy and our competitive position in the world economy or whether we will glorify the free market while implementing ad hoc policies, and watch our position deteriorate even further.

10. The primary purpose of the passage is to
  - (A) attack two alternative approaches to a problem
  - (B) criticize a particular point of view
  - (C) explain the causes of a phenomenon
  - (D) present the positive and negative aspects of a proposed solution to a problem
  - (E) detail the strengths of a particular set of policies
11. The author's attitude toward Gilder's point of view can be best described as
  - (A) antagonistic
  - (B) bitter
  - (C) detached
  - (D) tolerant
  - (E) apologetic
12. Which of the following best describes the organization of the fourth paragraph?
  - (A) Three specific examples used in an argument in the third paragraph are substantiated.
  - (B) Three pieces of newly discovered evidence in support of an argument in the third paragraph are discussed.
  - (C) Three interpretations of data presented in the third paragraph are considered.
  - (D) Three criticisms of an argument presented in the third paragraph are refuted.
  - (E) Three points of an argument presented in the third paragraph are specifically opposed.
13. The author of the passage implies that George Gilder would regard all of the following as obstacles to the operation of "unfettered capitalism" (line 12) EXCEPT
  - (A) competition between United States and foreign manufacturers for United States markets
  - (B) enforcement of federal civil rights legislation
  - (C) standards for clean air that improve air quality around industrial sites
  - (D) a ban on exposure of unprotected workers to hazardous materials like asbestos
  - (E) widespread representation of skilled workers by collective bargaining units

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

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Gilder and many other conservatives ridicule the concept of industrial policy. It is evident, however, that the United States has, and will continue to have (Gilder notwithstanding), a set of industrial policies (e.g., tax and trade policies, antitrust laws, research and development programs). So the question is not whether there should be an industrial policy. Rather, the issue is whether we will develop a set of explicit and coordinated policies to strengthen our domestic economy and our competitive position in the world economy or whether we will glorify the free market while implementing ad hoc policies, and watch our position deteriorate even further.

14. According to the author of the passage, which of the following is true of the tax incentives that some communities use to induce businesses to move there?

- (A) They discourage foreign businesses from locating in those communities.
- (B) They result in an economic decline in those communities.
- (C) They are a major influence on business location decisions.
- (D) Their most noticeable effect is a geographical shift of a fixed number of jobs from one community to another.
- (E) Their impact on local taxpayers is detrimental, as individuals must bear the cost of luring business to the community.

15. The author uses the phrase "ad hoc policies" in lines 56-57 as a contrast to which of the following phrases as it is used in the passage?

- (A) "set of industrial policies" (line 49)
- (B) "tax and trade policies" (lines 49-50)
- (C) "explicit and coordinated policies" (lines 53-54)
- (D) "competitive position" (line 55)
- (E) "free market" (line 56)

16. The author of the passage makes which of the following assumptions in his argument against reducing workers' wages?

- (A) Workers do not deposit money they earn as wages in savings accounts.
- (B) When workers' wages are sufficiently high, they are more productive on the job.
- (C) If their wages were reduced, workers would be forced to obtain loans to finance major purchases.
- (D) There is a correlation between the amount of workers' wages and the demand for consumer goods.
- (E) Reducing workers' wages is an attack on the fundamental benefits achieved by collective bargaining rights.

GO ON TO THE NEXT PAGE.

The years that saw the founding of Cornell and Stanford Universities were also the years when many small private colleges were established in the southern United States to serve the educational needs of the newly freed slaves. While great nineteenth-century industrial entrepreneurs like Ezra Cornell and Leland Stanford gave amounts ranging from half a million to tens of millions of dollars to found great private teaching and research universities where none had previously existed, and while many others, less famous, gave impressive sums to expand and refurbish modest college establishments that had already taken root, there were no comparable benefactions for private Black higher educational institutions. Only in the twentieth century, and then mostly through the donations of a handful of individuals and bodies like the General Education Board of the Rockefeller Foundation and the Julius Rosenwald Fund, did the struggling private Black institutions begin to receive support in single-gift amounts larger than a few thousand dollars.

A similar disparity existed between Black and White state-supported institutions. The Morrill Act of 1862 is considered by some to be the most important piece of federal legislation affecting state-supported higher education in the nineteenth century. It created the basis on which states established land-grant institutions throughout the country, most successfully perhaps in the midwestern states. Less has been written about the Morrill Act of 1890, which made possible the establishment of separate Black land-grant institutions in the southern and border states, where the majority of Black people lived before the First World War. Though it is called the "Second Morrill Act," no one would seriously contend that it achieved monetarily for Black land-grant institutions anything comparable to what the 1862 legislation accomplished for other land-grant institutions. The "separate but equal" principle, even if it had been faithfully adhered to, could never have created Black land-grant institutions in the southern and border states as financially secure as the land-grant institutions that developed with the help of the 1862 act: these states simply were not generous in their appropriations for state-supported education.

So long as college education was uncommon (which it was until well into the twentieth century) and so long as even high school education was not an occupational requirement (note that only about fifteen percent of the age group fourteen to seventeen was enrolled in high school even as late as 1910), it was possible to ignore the very substantial differences that existed between the educational opportunities available to White people and those available to Black people. After the Second World War, high school and college education became common among White youth, while the overwhelming majority of Black youth were still excluded from the college option. It was then that the full extent of the financial discrimination against Black higher educational institutions became apparent.

17. The author connects the timing of the establishment of many small private Black colleges in the South to which of the following events?
  - (A) The emancipation of the slaves
  - (B) The passage of the Morrill Act in 1862
  - (C) The passage of the Morrill Act in 1890
  - (D) The increase in the number of Black students attending high school
  - (E) The establishment of charitable foundations like the Rockefeller Foundation and the Julius Rosenwald Fund
18. The passage suggests that if a high school education had been an occupational requirement in 1910, which of the following would have been true?
  - (A) The low number of students who received vocational education in high school would have become apparent.
  - (B) The differences among states in their appropriations for high school education would have become apparent.
  - (C) The proportion of teen-agers between fourteen and seventeen years old enrolled in high school would have been greater than fifteen percent.
  - (D) The financial discrimination against Black high schools and Black land-grant institutions in the southern and border states would have been even greater.
  - (E) The state appropriations for White and Black high schools in the midwestern, border, and southern states would have been more equitable.

GO ON TO THE NEXT PAGE.

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A similar disparity existed between Black and White state-supported institutions. The Morrill Act of 1862 is considered by some to be the most important piece of federal legislation affecting state-supported higher education in the nineteenth century. It created the basis on which states established land-grant institutions throughout the country, most successfully perhaps in the midwestern states. Less has been written about the Morrill Act of 1890, which made possible the establishment of separate Black land-grant institutions in the southern and border states, where the majority of Black people lived before the First World War. Though it is called the "Second Morrill Act," no one would seriously contend that it achieved monetarily for Black land-grant institutions anything comparable to what the 1862 legislation accomplished for other land-grant institutions. The "separate but equal" principle, even if it had been faithfully adhered to, could never have created Black land-grant institutions in the southern and border states as financially secure as the land-grant institutions that developed with the help of the 1862 act: these states simply were not generous in their appropriations for state-supported education.

So long as college education was uncommon (which it was until well into the twentieth century) and so long as even high school education was not an occupational requirement (note that only about fifteen percent of the age group fourteen to seventeen was enrolled in high school even as late as 1910), it was possible to ignore the very substantial differences that existed between the educational opportunities available to White people and those available to Black people. After the Second World War, high school and college education became common among White youth, while the overwhelming majority of Black youth were still excluded from the college option. It was then that the full extent of the financial discrimination against Black higher educational institutions became apparent.

19. Which of the situations described in the following statements is most analogous to the situation described in the sentence in lines 44-52 of the passage?
  - (A) Until recently, so few students obtained experience with computers in high school and so few jobs required even minimal computer experience that inequity of access to computers in different high schools went unnoticed.
  - (B) As long as few people completed high school and pursued college degrees, extensive programs of financial aid for college students were unnecessary.
  - (C) So long as most people believe that equality of opportunity has been achieved for members of minority groups, women, and people who have disabilities, and so long as equality of results is not a goal in this country, little progress will be made toward a truly just society.
  - (D) Colleges provide such different amounts of financial support for their athletic teams and the importance of sports activities in obtaining jobs is so variable that it is hard for a college applicant to assess the significance of a college's athletics program.
  - (E) Since a doctoral degree is not usually required for teaching high school and since many high school systems do not even require that their faculty have masters' degrees, it is easy for education students to ignore the benefits of pursuing graduate studies.
20. According to the passage, if the southern and border states had adhered faithfully to the principle of "separate but equal," which of the following would have been true?
  - (A) Private colleges and universities in those states would have received more generous state appropriations.
  - (B) Black private institutions in those states would have received state appropriations equal to those given to Black land-grant institutions in those states.
  - (C) Black private institutions in those states would not have received state appropriations for expansion and renovation.
  - (D) Black private institutions in those states would not have received donations as large as Black private institutions in other states received.
  - (E) Black land-grant institutions in those states would not have received as much state financial support as land-grant institutions in the midwestern states received.

GO ON TO THE NEXT PAGE.

21. It can be inferred from the passage that, in the nineteenth century, gifts to private Black institutions were typically given.
- (A) by nineteenth-century industrial entrepreneurs such as Leland Stanford
  - (B) by bodies like the General Education Board of the Rockefeller Foundation
  - (C) to establish institutions that were to be named after the donors
  - (D) in an attempt to make private Black institutions competitive with Black land-grant institutions
  - (E) by benefactors in amounts of no more than a few thousand dollars
22. The author refers to the Julius Rosenwald Fund primarily in order to
- (A) clarify an ambiguity
  - (B) provide an example
  - (C) emphasize a problem
  - (D) defend an assertion
  - (E) introduce an argument
23. The author implies that after the changes in college education following the Second World War, which of the following occurred?
- (A) A college degree became a requirement for a large number of occupations.
  - (B) Enrollment in high school of the age group fourteen to seventeen increased by fifteen percent.
  - (C) The relatively low number of Black and White college graduates in the southern and border states became apparent.
  - (D) The relatively low number of Black people who obtained college degrees became obvious.
  - (E) The number of graduates of Black higher educational institutions increased rapidly.
24. According to the passage, large private donations to higher education in the nineteenth century were given for which of the following purposes?
- I. To promote more egalitarian ideals
  - II. To assist certain established colleges
  - III. To found major teaching and research universities
- (A) II only
  - (B) III only
  - (C) I and II only
  - (D) II and III only
  - (E) I, II, and III
25. Which of the following titles best summarizes the content of the passage?
- (A) A History of Black Higher Education
  - (B) Financial Support for Black Higher Education
  - (C) A Financial History of Major Private and Land-Grant Universities
  - (D) A Comparison of the Financial Support Given to Black Private Institutions and Black Land-Grant Institutions
  - (E) The Successful Growth of Black Higher Education Despite Financial Difficulties

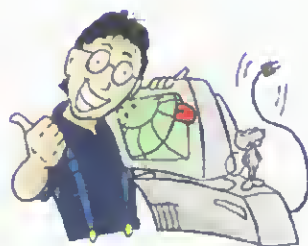
## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Practices for GMAT

## Book 1

# Test 5



## Practices for GMAT Book 1

### SECTION 1

30 Minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to fill in oval

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

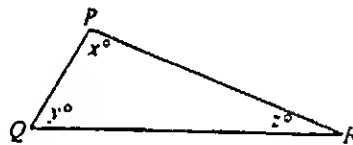
You may assume that the positions of points, angles, regions, etc., exist in the order shown.

All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

- (1)  $PQ = PR$
- (2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

1. If today the price of an item is \$3,600, what was the price of the item exactly 2 years ago?
  - (1) The price of the item increased by 10 percent per year during this 2-year period.
  - (2) Today the price of the item is 1.21 times its price exactly 2 years ago.
2. By what percent has the price of an overcoat been reduced?
  - (1) The original price was \$380.
  - (2) The original price was \$50 more than the reduced price.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
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- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

3. If the Longfellow Playground is rectangular, what is its width?

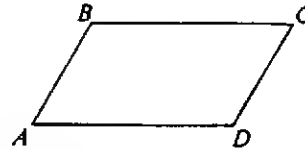
- (1) The ratio of its length to its width is 7 to 2.
- (2) The perimeter of the playground is 396 meters.

4. What is the value of  $x - 1$ ?

- (1)  $x + 1 = 3$
- (2)  $x - 1 < 3$

5. Is William taller than Jane?

- (1) William is taller than Anna.
- (2) Anna is not as tall as Jane.



6. In parallelogram  $ABCD$  above, what is the measure of  $\angle ADC$ ?

- (1) The measure of  $\angle ABC$  is greater than  $90^\circ$ .
- (2) The measure of  $\angle BCD$  is  $70^\circ$ .

7. Is  $x^2$  equal to  $xy$ ?

- (1)  $x^2 - y^2 = (x + 5)(y - 5)$
- (2)  $x = y$

8. Was 70 the average (arithmetic mean) grade on a class test?

- (1) On the test, half of the class had grades below 70 and half of the class had grades above 70.
- (2) The lowest grade on the test was 45 and the highest grade on the test was 95.

GO ON TO THE NEXT PAGE.



## Practices for GMAT Book 1

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9. What was John's average driving speed in miles per hour during a 15-minute interval?

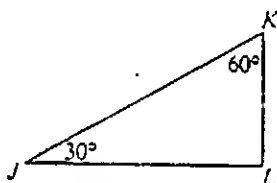
- (1) He drove 10 miles during this interval.
- (2) His maximum speed was 50 miles per hour and his minimum speed was 35 miles per hour during this interval.

10. Is  $\triangle MNP$  isosceles?

- (1) Exactly two of the angles,  $\angle M$  and  $\angle N$ , have the same measure.
- (2)  $\angle N$  and  $\angle P$  do not have the same measure.

11. Is  $n$  an integer greater than 4?

- (1)  $3n$  is a positive integer.
- (2)  $\frac{n}{3}$  is a positive integer.



12. In  $\triangle JKL$  shown above, what is the length of segment  $JL$ ?

- (1)  $JK = 10$
- (2)  $KL = 5$

13. A coal company can choose to transport coal to one of its customers by railroad or by truck. If the railroad charges by the mile and the trucking company charges by the ton, which means of transporting the coal would cost less than the other?

- (1) The railroad charges \$5,000 plus \$0.01 per mile per railroad car used, and the trucking company charges \$3,000 plus \$85 per ton.
- (2) The customer to whom the coal is to be sent is 195 miles away from the coal company.

14. Is  $x - y > r - s$ ?

- (1)  $x > r$ , and  $y < s$ .
- (2)  $y = 2$ ,  $s = 3$ ,  $r = 5$ , and  $x = 6$ .

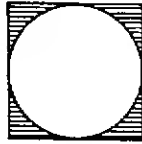
15. On a certain day it took Bill three times as long to drive from home to work as it took Sue to drive from home to work. How many kilometers did Bill drive from home to work?

- (1) Sue drove 10 kilometers from home to work, and the ratio of distance driven from home to work / time to drive from home to work was the same for Bill and Sue that day.
- (2) The ratio of distance driven from home to work / time to drive from home to work for Sue that day was 64 kilometers per hour.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

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16. The figure above represents the floor of a square foyer with a circular rug partially covering the floor and extending to the outer edges of the floor as shown. What is the area of the foyer that is not covered by the rug?
- (1) The area of the foyer is 9 square meters.
  - (2) The area of the rug is  $2.25\pi$  square meters.
17. At a certain university, if 50 percent of the people who inquire about admission policies actually submit applications for admission, what percent of those who submit applications for admission enroll in classes at the university?
- (1) Fifteen percent of those who submit applications for admission are accepted at the university.
  - (2) Eighty percent of those who are accepted send a deposit to the university.
18. If  $x$  and  $y$  are nonzero integers, is  $\frac{x}{y}$  an integer?
- (1)  $x$  is the product of 2 and some other integer.
  - (2) There is only one pair of positive integers whose product equals  $y$ .
19. If  $x$  is an integer, what is the value of  $x$ ?
- (1)  $\frac{1}{5} < \frac{1}{x+1} < \frac{1}{2}$
  - (2)  $(x-3)(x-4) = 0$
20. Is quadrilateral  $Q$  a square?
- (1) The sides of  $Q$  have the same length.
  - (2) The diagonals of  $Q$  have the same length.
21. If  $K$  is a positive integer less than 10 and  $N = 4,321 + K$ , what is the value of  $K$ ?
- (1)  $N$  is divisible by 3.
  - (2)  $N$  is divisible by 7.

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

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D EACH statement ALONE is sufficient.  
E Statements (1) and (2) TOGETHER are NOT sufficient.
22. A jewelry dealer initially offered a bracelet for sale at an asking price that would give a profit to the dealer of 40 percent of the original cost. What was the original cost of the bracelet?
- (1) After reducing this asking price by 10 percent, the jewelry dealer sold the bracelet at a profit of \$403.  
(2) The jewelry dealer sold the bracelet for \$1,953.
23. If  $n$  is an integer between 2 and 100 and if  $n$  is also the square of an integer, what is the value of  $n$ ?
- (1)  $n$  is the cube of an integer.  
(2)  $n$  is even.
24. Is  $x^2 - y^2$  a positive number?
- (1)  $x - y$  is a positive number.  
(2)  $x + y$  is a positive number.
25. The surface area of a square tabletop was changed so that one of the dimensions was reduced by 1 inch and the other dimension was increased by 2 inches. What was the surface area before these changes were made?
- (1) After the changes were made, the surface area was 70 square inches.  
(2) There was a 25 percent increase in one of the dimensions.

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 2

Time—30 minutes

25 Questions

Directions: Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and blacken the corresponding space on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

- By the late 1920's advertising in the United States had acquired the characteristics it has now and probably will retain for as long as there is a competitive market economy. This "highly organized and professional system of magical inducements and satisfactions," as eminent social critic Raymond Williams described it, has continued to have as its goal the selling of a panoply of goods among which there are most often few salient differences. Working from the premise of the irrationality of the consumer, this vast fantasy machine employs every conceivable visual and rhetorical gimmick to turn the public's attention from the generic product to the symbolic attributes of a particular brand.

- In retrospect, two aspects of the development of the advertising business are remarkable. The first is how quickly after the emergence of mass media it assumed its shape. The second, all the more remarkable when one considers that advertising's business is evanescent appearances, is how durable that shape has proven to be. To be sure, some changes have taken place since 1930, most notably the emergence and influence of the electronic media—radio and particularly television. But despite such surface changes, advertising remains, at bottom, what it was fifty or more years ago: the business of manufacturing illusions.

- To some degree, advertising's means and ends remain basically unaltered because those who create ads have always experienced the same conflicts felt by other members of twentieth-century American society. These conflicts stem from a contradiction between our democratic ideology, with its emphasis on individual choice and freedom of expression, and an economy that encourages and indeed depends on conformity and predictability among both producers (employers as well as employees) and consumers.

- Ours is also a society that has traditionally valued spontaneity, risk, and adventure; largely for that reason we cherish the myth of the frontier, where those qualities, we believe, once flourished. Yet in the United States today, most people inhabit an urban or suburban world that is overly regulated, hemmed in by routine, and presided over by scores of specialists and experts. "Adventure" itself has become a commodity: a packaged trip down the Colorado River, an organized trek across the Himalayas, two weeks on a dude ranch. Room for real adventure is limited, if it exists at all.

Far from immune to these and other contra-

- ditions, advertising people have recognized that their skills are harnessed to large, impersonal organizations and that the end of their efforts is to convince millions of consumers that they would be happier, even better, human beings if they used Brand X instead of Brand Y. Given the conditions of their work and of ordinary life, it is not really surprising that generations of advertising people have aimed to transform a prosaic world of commodities into a magical place of escape, illusion, and fantasy, to express imaginative freedom and creativity in the face of routine.

1. It can be inferred from the passage that which of the following best describes the function of advertising in a competitive market economy?
- (A) A competitive economy creates many choices for consumers; thus, a highly organized system that educates consumers about goods is essential.
- (B) In a competitive market, the company that sells more earns bigger profits; thus, advertising is the most important element in successful competition.
- (C) Advertising became a highly competitive business by the late 1920's, and the economy of the United States has encouraged the competition among advertisers.
- (D) Part of democratic ideology is freedom of choice, and advertising creates real consumer choices in a competitive market economy.
- (E) In a competitive market economy, there are many similar products competing for buyers; advertising maintains the competition by creating apparent differences among products.

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

2. The author's assertion that advertising works "from the premise of the irrationality of the consumer" (lines 10-11) implies which of the following about advertising?
- (A) Advertisers assume that consumers cannot understand the differences among products.
  - (B) Advertising works by convincing consumers that advertising agency employees feel the same pressures as consumers.
  - (C) Advertisers assume that consumers can be influenced by fantasy.
  - (D) Advertisers believe that consumers do not know what products are on the market.
  - (E) Advertising is based on the belief that consumers do not want to differentiate among products.
3. According to the passage, which of the following is true of the people who work in advertising?
- (A) They feel superior to other consumers.
  - (B) They compete more successfully in the American economy than do other consumers.
  - (C) They are caught in the same conflicts as other Americans.
  - (D) They believe that the differences advertising creates among products are real.
  - (E) They believe that they are using their talents to improve other people's lives.
4. The author implies that the twentieth-century belief in the "myth of the frontier" (line 42) has
- (A) made it difficult for Americans to adjust to an urbanized environment.
  - (B) helped Americans to conform to the expectations and demands of a market economy
  - (C) increased the number of trips planned and taken by Americans
  - (D) encouraged Americans to resist the depersonalization and regulation of their daily lives
  - (E) allowed Americans to continue to value qualities that have largely disappeared from their daily lives.
5. The author would most probably agree with which of the following statements about advertising?
- (A) Advertising is necessary because it helps to distribute the goods industry produces.
  - (B) Advertising has too much power over the economic well-being of the American people.
  - (C) Advertising is crucial to the psychological well-being of most Americans because it allows them a richly imagined life outside their routines.
  - (D) Advertising reveals the conflicts of twentieth-century American society by creating images that are incompatible with the realities of everyday life.
  - (E) Advertising undermines the basis of American society because it is antidemocratic.
6. The author is primarily interested in
- (A) criticizing the methods used by American advertising
  - (B) analyzing the means and ends of American advertising
  - (C) explaining the connections between the American economy and advertising
  - (D) warning readers of the dangers posed by advertising
  - (E) encouraging readers to become more skeptical consumers
7. According to the passage, it is surprising that the basis of American advertising has changed so little since the late 1920's because
- (A) American society has changed enormously since the 1920's
  - (B) the electronic mass media are so much a part of daily experience
  - (C) the business of advertising is the creation of temporary images
  - (D) the American public is much less adventurous than it was in the late 1920's
  - (E) advertising developed so rapidly after the emergence of the mass media
8. The author's attitude toward the people who work in advertising can be best described as one of
- (A) tolerant understanding
  - (B) wholehearted admiration
  - (C) scornful superiority
  - (D) reluctant criticism
  - (E) amused contempt
9. According to the passage, the democratic ideology of the United States is at odds with a competitive market economy because
- (A) individual freedom of choice and expression is inconsistent with group conformity and predictability
  - (B) individual freedoms are unimportant in a society where competition for economic gain exists
  - (C) the American democratic ideology is concerned with individual welfare, while the competitive market economy is concerned with group behavior
  - (D) most people believe that economic success is more important than individual freedom
  - (E) such an economic system fails if people believe in individual freedom of choice

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Because natural selection acts against genes that cause inherited disorders, lethal genetic diseases should be, and generally are, very rare. Thus it seems surprising that certain inherited disorders of red blood cells, notably sickle cell anemia and thalassemia, occur in some populations at unusually high frequencies. We have been able to explain this phenomenon through natural selection by assuming that the same variant gene that causes the lethal diseases in homozygous individuals (who inherit two abnormal genes, one from each parent) protects heterozygous individuals (who inherit one abnormal and one normal gene) against another potentially lethal, and more prevalent, disease—in this case malaria, which is produced by a parasite that infects red blood cells. That protection maintains the high frequencies of these otherwise deleterious genes.

The strength of malaria as a selective force derives from its powerful effects on the health and reproductive capacity of human populations. Malaria has been a major cause of death throughout history, contributing in Africa today to early-childhood mortality rates that are as high as 50 percent. It kills about 10 percent of its victims directly and contributes to the death of others by decreasing the ability of their immune systems to fight off other infections. Its high mortality rate ensures that a significant number of individuals will not live to reproduce; thus, any genetic mutation that provides resistance to malaria must have a high selective advantage.

That the sickle cell gene might confer such resistance was first indicated by the coincidence of the geographic ranges of sickle cell disease and malaria. Clinical evidence was harder to come by, but in 1954 Allison showed that children with the sickle cell gene had much milder cases of malaria than did children without it. Because the biochemical mechanism of this resistance to malaria could not, however, be established, the role of the sickle cell gene could not be unequivocally demonstrated.

This state of affairs persisted until 1977, when, after fifty years of attempts, a procedure was devised that allowed researchers to maintain malaria parasites in a laboratory culture. Using this technique, scientists could finally investigate how sickle cell blood cells protect a heterozygous carrier against malaria. They soon discovered that the parasite in an infected sickle cell develops normally up to the time that the cell is sequestered in tissue. There the low-oxygen environment and the low intracellular pH induce the characteristic sickling in the host cell, causing its potassium level to drop; this in turn causes the parasite to die. Such a process can protect against malaria even if not all of the parasites are affected because any meaningful reduction in the rate of multiplication of the parasite gives the immune system the time necessary to mount a protective response of its own.

10. The primary purpose of the passage is to
  - (A) announce that the mechanism of sickle cell anemia has been discovered and to explain why the discovery was so difficult
  - (B) explore the limits of natural selection and the way in which certain diseases can transcend them
  - (C) describe how sickle cell anemia is produced and where it is most prevalent
  - (D) explain why the gene for sickle cell anemia has persisted and how this explanation was confirmed
  - (E) analyze the effects of malaria on human populations and to suggest a way in which these effects can be minimized
11. According to the passage, which of the following is typically true of lethal genetic disorders?
  - (A) They protect against some other lethal disease.
  - (B) They are diseases of the red blood cells.
  - (C) They have extremely low frequencies of occurrence.
  - (D) They kill both homozygous and heterozygous individuals.
  - (E) They occur only in certain geographical areas.
12. According to the passage, most malaria-related deaths occur
  - (A) in areas only recently exposed to the disease
  - (B) among young children
  - (C) because of a mutation in the victim's genes
  - (D) in individuals heterozygous for the sickle cell gene
  - (E) because victims become more susceptible to other infections
13. It can be inferred from the passage that the number of individuals homozygous for the sickle cell gene is
  - (A) approximately equal to the number who contract malaria
  - (B) slightly smaller than the number who are heterozygous for the sickle cell gene
  - (C) significantly smaller than the number who contract malaria
  - (D) significantly larger than the number who are heterozygous for the sickle cell gene
  - (E) approximately equal to the number who die of malaria

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14. According to the passage, the immediate cause of death of a malaria parasite in a red blood cell undergoing sickling is
- (A) a drop in the pH level of the cell
  - (B) a drop in the potassium level of the cell
  - (C) a drop in the oxygen content of the environment surrounding the cell
  - (D) the sequestering of the cell in tissue
  - (E) the protective response of the organism's immune system
15. The author suggests that in a lethal attack of malaria, which of the following occurs?
- (A) The intracellular pH drops much too slowly to induce sufficient sickling of red blood cells.
  - (B) The malaria parasites spread much more rapidly than the host's immune system can respond.
  - (C) Additional homozygous red blood cells are produced far more slowly than the malaria parasites spread.
  - (D) The introduction of the malaria parasite prevents the host's immune system from responding.
  - (E) The host's red blood cells are not sequestered in tissue in quantities sufficient to produce adequate supplies of sickled cells.
16. Which of the following best describes the organization of the first paragraph?
- (A) A generalization is presented and a seeming anomaly is reconciled with it.
  - (B) A thesis is advanced and a counterexample is introduced to refute it.
  - (C) An argument is advanced and a general conclusion is derived from it.
  - (D) An explanation is proposed and examined in detail.
  - (E) Opposing views are presented and their differences clarified.
17. Which of the following is most clearly an example of the way in which the majority of fatalities from malaria occur, as the process is described in the passage?
- (A) After an attack of malaria, the victim dies from a case of pneumonia.
  - (B) Weakened from a case of the flu, the victim dies after contracting malaria.
  - (C) The victim contracts malaria and dies shortly after exhibiting the first symptoms.
  - (D) The victim inherits a blood disorder and quickly dies when infected with malaria.
  - (E) The victim contracts malaria and, weakened by repeated bouts with it, eventually dies.

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Those scholars who are engaged in the attempt to explain human experience realize that while experience is ungraspable in one sense, it is also a human construct. Feminist theory brings the added

(5) awareness that the construction of women's experience has never been adequate. Whether that experience was made trivial or enviable, sanctified or mystified, it has been peripheral, described and explained primarily not by women themselves, but

(10) by men. Since women's experience has so rarely been a direct focus for theoretical consciousness, a whole range and spectrum of human life remains to be explored, depicted, and understood.

- For this reason, feminist theory is fundamentally
- (15) experiential. Its subject is women's lives, past or present, historically recorded or known only by inference, experienced in association with men of the dominant culture or with men who are also oppressed. Feminist theory reconsiders historical,
- (20) economic, religious, biological, artistic, and anthropological constructs and explanations. It brings to theoretical consciousness facets of women's experience that have hitherto escaped attention because they have not been part of, and
- (25) may even have contradicted, predominant theoretical accounts of human life. It rethinks thinking itself, for to conceive women's lives as actual often fractures the theoretical and philosophical constructs that left those lives out of
- (30) account.

- Thus, the essential first step in feminist theory is consciousness-raising, which supplies, as Catharine MacKinnon points out, "the major technique of
- (35) analysis, structure of organization, method of practice, and theory of social change [for] the women's movement." At one level, all women's experiences must be embraced in statements about women in general; and yet, as Mary O'Brien puts it, "There is no Woman but real flesh and blood
- (40) female creatures with brains and pains and aspirations." Individual women have become conscious of their situation by a personal re-vision of the economic practices, sexual mores, and political realities that have assigned that situation
- (45) to them. Those of them who are feminist theorists must also come to terms with the philosophical constructs that shape their milieu, and with the theorists who first produced those constructs as living thought—Marx, Confucius, Freud, Saint
- (50) Paul. They must scan the beacons that flare along the horizon of all culture, asking whether any one of those beacons is their own lighthouse.

- Feminist theory must also criticize itself and counter the tendency to congeal into a new
- (55) ideology. Ideologies encompass unexamined thoughts about people's lives; they are frozen

theory, adopted as convenient or embraced fervently as dogma, unquestioned. To remain true to their own vision of the truth, feminist theorists

(60) must continue to test thinking against experience, making sure that it remains rooted in the real lives of women.

18. The primary purpose of the passage is to
- (A) refute a theoretical argument  
(B) discuss a theoretical approach  
(C) broaden a theoretical category  
(D) support a hypothesis  
(E) modify an explanation

19. According to the passage, feminist theory is "fundamentally experiential" (lines 14-15) in that it
- (A) considers experience to be the source of all knowledge  
(B) infers the usefulness of traditional theoretical constructs on the basis of experience  
(C) rejects the principle that experience is ungraspable  
(D) takes women's experience as its subject  
(E) compares women's experiences to those of men

20. According to the author, the construction of women's experience has in the past been inadequate in which of the following ways?
- I. Women's experience has been recounted mainly by men, rather than by women.  
II. Women's experience has typically been the focus of experiential rather than theoretical analysis by male theorists.  
III. Women's experience has usually been a marginal rather than a primary subject for male theorists.
- (A) I only  
(B) I and II only  
(C) I and III only  
(D) II and III only  
(E) I, II, and III

GO ON TO THE NEXT PAGE.



21. In the context of the passage, the quotation from Catharine MacKinnon (lines 33-36) most clearly functions as which of the following?
- (A) A description of the multiple purposes of consciousness-raising in the construction of feminist theory
  - (B) A refutation of the argument that consciousness-raising is of little importance to feminist theory
  - (C) A suggestion that consciousness-raising is more important to the women's movement than it is to feminist theory
  - (D) An explanation of how the technique of consciousness-raising operates
  - (E) An analysis of the importance of consciousness-raising in the growth of the women's movement
22. According to the author, feminist theory can avoid becoming a new ideology if feminist theorists do which of the following?
- (A) Continually test feminist theory against the actual experiences of women
  - (B) Strongly emphasize the role of feminist theory in women's social consciousness
  - (C) Critically challenge theories produced by members of the dominant culture
  - (D) Carefully question the philosophical constructs produced by Marx, Confucius, Freud, and Saint Paul
  - (E) Frequently reject new historical, economic, religious, biological, artistic, and anthropological constructs and explanations
23. The author quotes Mary O'Brien (lines 39-41) most probably in order to
- (A) provide a contrast to the next sentence concerning individual women
  - (B) qualify the preceding statement concerning all women's experiences
  - (C) allude to women's physical beings as well as to their intellectual and emotional experiences
  - (D) suggest that women have too rarely been viewed as individuals
  - (E) reinforce the argument that consciousness-raising is the major technique of analysis of the women's movement
24. It can be inferred from the passage that "the beacons that flare along the horizon of all culture" (lines 50-51) are most probably meant to symbolize which of the following?
- (A) Philosophical constructs that have become influential
  - (B) Unexamined ideologies that many embrace as dogma
  - (C) Economic practices, sexual mores, and political realities of which women are aware
  - (D) Feminist philosophical constructs that draw on Marx, Confucius, Freud, and Saint Paul
  - (E) Religious philosophies formulated by Confucius, Saint Paul, and other well-known thinkers
25. According to the author, some aspects of women's experiences have in the past been overlooked for which of the following reasons?
- (A) They occurred before the development of Freud's theories.
  - (B) They were experienced by only a few individual women.
  - (C) They did not fit feminist theorists' ideology.
  - (D) They did not fit generally accepted theories of human experience.
  - (E) They were not consistent with women's theoretical insights.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

Practices for GMAT Book 1

SECTION 3

30 Minutes

20 Questions

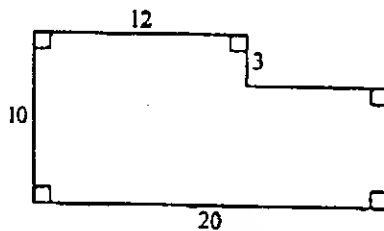
**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this section are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1.  $6.09 - 4.693 =$

- (A) 1.397 (B) 1.403 (C) 1.407  
(D) 1.497 (E) 2.603



2. What is the area of the region enclosed by the figure above?

- (A) 116 (B) 144 (C) 176  
(D) 179 (E) 284

3. If  $p = 0.2$  and  $n = 100$ , then  $\sqrt{\frac{p(1-p)}{n}} =$

- (A)  $-\sqrt{0.002}$   
(B)  $\sqrt{0.02} - 0.02$   
(C) 0  
(D) 0.04  
(E) 0.4

4. If each of 4 subsidiaries of Corporation R has been granted a line of credit of \$700,000 and each of the other 3 subsidiaries of Corporation R has been granted a line of credit of \$112,000, what is the average (arithmetic mean) line of credit granted to a subsidiary of Corporation R?

- (A) \$1,568,000  
(B) \$448,000  
(C) \$406,000  
(D) \$313,600  
(E) \$116,000

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**Practices for GMAT Book 1**

5. If  $x$  is a number such that  $x^2 - 3x + 2 = 0$  and  $x^2 - x - 2 = 0$ , what is the value of  $x$ ?
- (A) -2  
(B) -1  
(C) 0  
(D) 1  
(E) 2
6. In traveling from a dormitory to a certain city, a student went  $\frac{1}{5}$  of the way by foot,  $\frac{2}{3}$  of the way by bus, and the remaining 8 kilometers by car. What is the distance, in kilometers, from the dormitory to the city?
- (A) 30 (B) 45 (C) 60 (D) 90 (E) 120
7. A certain elevator has a safe weight limit of 2,000 pounds. What is the greatest possible number of people who can safely ride on the elevator at one time with the average (arithmetic mean) weight of half the riders being 180 pounds and the average weight of the others being 215 pounds?
- (A) 7  
(B) 8  
(C) 9  
(D) 10  
(E) 11
8. After paying a 10 percent tax on all income over \$3,000, a person had a net income of \$12,000. What was the income before taxes?
- (A) \$13,300  
(B) \$13,000  
(C) \$12,900  
(D) \$10,000  
(E) \$9,000

GO ON TO THE NEXT PAGE.

9.  $1 - [2 - (3 - [4 - 5] + 6) + 7] =$   
 (A) -2 (B) 0 (C) 1 (D) 2 (E) 16
10. The price of a model *M* camera is \$209 and the price of a special lens is \$69. When the camera and lens are purchased together, the price is \$239. The amount saved by purchasing the camera and lens together is approximately what percent of the total price of the camera and lens when purchased separately?  
 (A) 14%  
 (B) 16%  
 (C) 29%  
 (D) 33%  
 (E) 86%
11. If 0.497 mark has the value of one dollar, what is the value to the nearest dollar of 350 marks?  
 (A) \$174 (B) \$176 (C) \$524  
 (D) \$696 (E) \$704
12. A right cylindrical container with radius 2 meters and height 1 meter is filled to capacity with oil. How many empty right cylindrical cans, each with radius  $\frac{1}{2}$  meter and height 4 meters, can be filled to capacity with the oil in this container?  
 (A) 1  
 (B) 2  
 (C) 4  
 (D) 8  
 (E) 16
13. If a sequence of 8 consecutive odd integers with increasing values has 9 as its 7th term, what is the sum of the terms of the sequence?  
 (A) 22  
 (B) 32  
 (C) 36  
 (D) 40  
 (E) 44

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14. A rectangular floor is covered by a rug except for a strip  $p$  meters wide along each of the four edges. If the floor is  $m$  meters by  $n$  meters, what is the area of the rug, in square meters?
- (A)  $mn - p(m + n)$   
 (B)  $mn - 2p(m + n)$   
 (C)  $mn - p^2$   
 (D)  $(m - p)(n - p)$   
 (E)  $(m - 2p)(n - 2p)$
15. Working alone,  $R$  can complete a certain kind of job in 9 hours.  $R$  and  $S$ , working together at their respective rates, can complete one of these jobs in 6 hours. In how many hours can  $S$ , working alone, complete one of these jobs?
- (A) 18  
 (B) 12  
 (C) 9  
 (D) 6  
 (E) 3
16. A family made a down payment of \$75 and borrowed the balance on a set of encyclopedias that cost \$400. The balance with interest was paid in 23 monthly payments of \$16 each and a final payment of \$9. The amount of interest paid was what percent of the amount borrowed?
- (A) 6%  
 (B) 12%  
 (C) 14%  
 (D) 16%  
 (E) 20%
17. If  $x \neq 0$  and  $x = \sqrt{4xy - 4y^2}$ , then, in terms of  $y$ ,  $x =$
- (A)  $2y$   
 (B)  $y$   
 (C)  $\frac{y}{2}$   
 (D)  $\frac{-4y^2}{1-4y}$   
 (E)  $-2y$

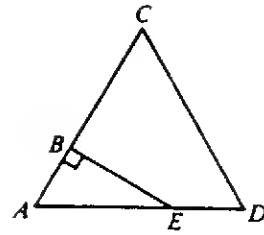
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18. Solution  $Y$  is 30 percent liquid  $X$  and 70 percent water. If 2 kilograms of water evaporate from 8 kilograms of solution  $Y$  and 2 kilograms of solution  $Y$  are added to the remaining 6 kilograms of liquid, what percent of this new solution is liquid  $X$ ?

(A) 30%  
 (B)  $33\frac{1}{3}\%$   
 (C)  $37\frac{1}{2}\%$   
 (D) 40%  
 (E) 50%

19.  $\frac{1}{\frac{1}{0.03} + \frac{1}{0.37}} =$

(A) 0.004  
 (B) 0.02775  
 (C) 2.775  
 (D) 3.6036  
 (E) 36.036



20. If each side of  $\triangle ACD$  above has length 3 and if  $AB$  has length 1, what is the area of region  $BCDE$ ?

(A)  $\frac{9}{4}$  (B)  $\frac{7}{4}\sqrt{3}$  (C)  $\frac{9}{4}\sqrt{3}$   
 (D)  $\frac{7}{2}\sqrt{3}$  (E)  $6 + \sqrt{3}$

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
 DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

**Practices for GMAT Book 1**

**SECTION 4.**

**30 Minutes**

**20 Questions**

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

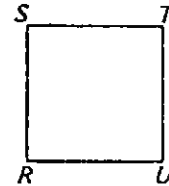
**Figures:** Figures that accompany problems in this section are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. Which of the following is equal to 85 percent of 160?

(A) 1.88 (B) 13.6 (C) 136  
(D) 188 (E) 13,600

2. The regular hourly wage for an employee of a certain factory is \$5.60. If the employee worked 8 hours overtime and earned  $1\frac{1}{2}$  times this regular hourly wage for overtime, how much overtime money was earned?

(A) \$67.20  
(B) \$55.40  
(C) \$50.00  
(D) \$44.80  
(E) \$12.00



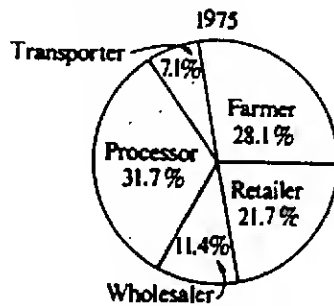
3. Square  $RSTU$  shown above is rotated in a plane about its center in a clockwise direction the minimum number of degrees necessary for  $T$  to be in the position where  $S$  is now shown. The number of degrees through which  $RSTU$  is rotated is

(A)  $135^\circ$  (B)  $180^\circ$  (C)  $225^\circ$   
(D)  $270^\circ$  (E)  $315^\circ$

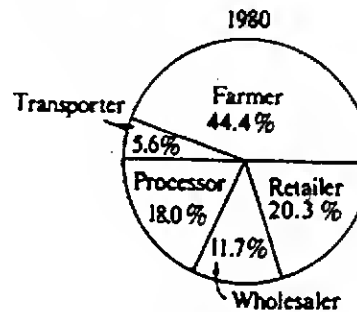
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Questions 4-5 refer to the following graphs.

BREAKDOWN OF COST TO CONSUMER FOR THE PRODUCTION  
OF 6 OUNCES OF FROZEN ORANGE JUICE



Cost to Consumer: \$0.30



Cost to Consumer: \$0.70

4. Of the following, which is closest to the increase from 1975 to 1980 in the amount received by the processor in producing 6 ounces of frozen orange juice?
- (A) \$0.03 (B) \$0.05 (C) \$0.06  
(D) \$0.08 (E) \$0.13
5. In 1980, approximately what fraction of the cost to the consumer for the production of 6 ounces of frozen orange juice went to the farmer?
- (A)  $\frac{3}{11}$  (B)  $\frac{1}{3}$  (C)  $\frac{4}{9}$  (D)  $\frac{5}{9}$  (E)  $\frac{3}{5}$

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6.  $\sqrt[4]{496}$  is between

- (A) 3 and 4
- (B) 4 and 5
- (C) 5 and 6
- (D) 6 and 7
- (E) 7 and 8

7. If  $x \neq 0$ ,  $2x = 5y$ , and  $3z = 7x$ , what is the ratio of  $z$  to  $y$ ?

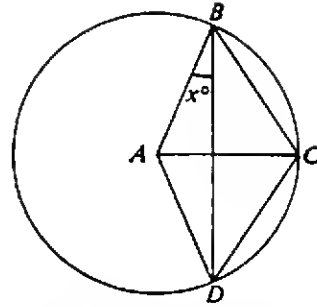
- (A) 2 to 21 (B) 3 to 5 (C) 14 to 15
- (D) 6 to 5 (E) 35 to 6

8. A grocer purchased a quantity of bananas at 3 pounds for \$0.50 and sold the entire quantity at 4 pounds for \$1.00. How many pounds did the grocer purchase if the profit from selling the bananas was \$10.00?

- (A) 40
- (B) 60
- (C) 90
- (D) 120
- (E) 240

9. There are between 100 and 110 cards in a collection of cards. If they are counted out 3 at a time, there are 2 left over, but if they are counted out 4 at a time, there is 1 left over. How many cards are in the collection?

- (A) 101 (B) 103 (C) 106 (D) 107 (E) 109



Note: Figure not drawn to scale.

10. If  $A$  is the center of the circle shown above and  $AB = BC = CD$ , what is the value of  $x$ ?

- (A) 15 (B) 30 (C) 45 (D) 60 (E) 75

11. Out of a total of 1,000 employees at a certain corporation, 52 percent are female and 40 percent of these females work in research. If 60 percent of the total number of employees work in research, how many male employees do NOT work in research?

- (A) 520
- (B) 480
- (C) 392
- (D) 208
- (E) 88

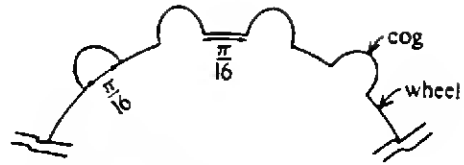
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12. An instructor scored a student's test of 50 questions by subtracting 2 times the number of incorrect answers from the number of correct answers. If the student answered all of the questions and received a score of 38, how many questions did that student answer correctly?

(A) 19  
(B) 38  
(C) 41  
(D) 44  
(E) 46

13. Which of the following integers does NOT have a divisor greater than 1 that is the square of an integer?

(A) 75  
(B) 42  
(C) 32  
(D) 25  
(E) 12



14. There are cogs around the circumference of a wheel and each cog is  $\frac{\pi}{16}$  centimeter wide with a space of  $\frac{\pi}{16}$  centimeter between consecutive cogs, as shown above. How many cogs of this size, with the same space between any two consecutive cogs, fit on a wheel with diameter 6 centimeters?

(A) 96  
(B) 64  
(C) 48  
(D) 32  
(E) 24

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**Practices for GMAT Book 1**

15. If  $r \odot s = rs + r + s$ , then for what value of  $s$  is  $r \odot s$  equal to  $r$  for all values of  $r$ ?
- (A)  $-1$  (B)  $0$  (C)  $1$  (D)  $\frac{1}{r+1}$  (E)  $r$
16. In each production lot for a certain toy, 25 percent of the toys are red and 75 percent of the toys are blue. Half the toys are size  $A$  and half are size  $B$ . If 10 out of a lot of 100 toys are red and size  $A$ , how many of the toys are blue and size  $B$ ?
- (A) 15  
(B) 25  
(C) 30  
(D) 35  
(E) 40
17. If  $2x + 5y = 8$  and  $3x = 2y$ , what is the value of  $2x + y$ ?
- (A) 4  
(B)  $\frac{70}{19}$   
(C)  $\frac{64}{19}$   
(D)  $\frac{56}{19}$   
(E)  $\frac{40}{19}$
18. A ladder 25 feet long is leaning against a wall that is perpendicular to level ground. The bottom of the ladder is 7 feet from the base of the wall. If the top of the ladder slips down 4 feet, how many feet will the bottom of the ladder slip?
- (A) 4  
(B) 5  
(C) 8  
(D) 9  
(E) 15
19. What is the least possible product of 4 different integers, each of which has a value between  $-5$  and  $10$ , inclusive?
- (A)  $-5040$  (B)  $-3600$  (C)  $-720$   
(D)  $-600$  (E)  $-120$
20. If a motorist had driven 1 hour longer on a certain day and at an average rate of 5 miles per hour faster, he would have covered 70 more miles than he actually did. How many more miles would he have covered than he actually did if he had driven 2 hours longer and at an average rate of 10 miles per hour faster on that day?
- (A) 100  
(B) 120  
(C) 140  
(D) 150  
(E) 160

**S T O P**

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## Practices for GMAT Book 1

### SECTION 5

30 Minutes

20 Questions

**Directions:** For each question in this section, select the best of the answer choices given.

1. Nearly one in three subscribers to *Financial Forecaster* is a millionaire, and over half are in top management. Shouldn't you subscribe to *Financial Forecaster* now?

A reader who is neither a millionaire nor in top management would be most likely to act in accordance with the advertisement's suggestion if he or she drew which of the following questionable conclusions invited by the advertisement?

- (A) Among finance-related periodicals, *Financial Forecaster* provides the most detailed financial information.
- (B) Top managers cannot do their jobs properly without reading *Financial Forecaster*.
- (C) The advertisement is placed where those who will be likely to read it are millionaires.
- (D) The subscribers mentioned were helped to become millionaires or join top management by reading *Financial Forecaster*.
- (E) Only those who will in fact become millionaires, or at least top managers, will read the advertisement.

Questions 2-3 are based on the following.

Contrary to the charges made by some of its opponents, the provisions of the new deficit-reduction law for indiscriminate cuts in the federal budget are justified. Opponents should remember that the New Deal pulled this country out of great economic troubles even though some of its programs were later found to be unconstitutional.

2. The author's method of attacking the charges of certain opponents of the new deficit-reduction law is to
- (A) attack the character of the opponents rather than their claim
  - (B) imply an analogy between the law and some New Deal programs
  - (C) point out that the opponents' claims imply a dilemma
  - (D) show that the opponents' reasoning leads to an absurd conclusion
  - (E) show that the New Deal also called for indiscriminate cuts in the federal budget

3. The opponents could effectively defend their position against the author's strategy by pointing out that

- (A) the expertise of those opposing the law is outstanding
- (B) the lack of justification for the new law does not imply that those who drew it up were either inept or immoral
- (C) the practical application of the new law will not entail indiscriminate budget cuts
- (D) economic troubles present at the time of the New Deal were equal in severity to those that have led to the present law
- (E) the fact that certain flawed programs or laws have improved the economy does not prove that every such program can do so

4. In Millington, a city of 50,000 people, Mercedes Pedrosa, a realtor, calculated that a family with Millington's median family income, \$28,000 a year, could afford to buy Millington's median-priced \$77,000 house. This calculation was based on an 11.2 percent mortgage interest rate and on the realtor's assumption that a family could only afford to pay up to 25 percent of its income for housing.

Which of the following corrections of a figure appearing in the passage above, if it were the only correction that needed to be made, would yield a new calculation showing that even incomes below the median family income would enable families in Millington to afford Millington's median-priced house?

- (A) Millington's total population was 45,000 people.
- (B) Millington's median annual family income was \$27,000.
- (C) Millington's median-priced house cost \$80,000.
- (D) The rate at which people in Millington had to pay mortgage interest was only 10 percent.
- (E) Families in Millington could only afford to pay up to 22 percent of their annual income for housing.

5. Psychological research indicates that college hockey and football players are more quickly moved to hostility and aggression than are college athletes in noncontact sports such as swimming. But the researchers' conclusion—that contact sports encourage and teach participants to be hostile and aggressive—is untenable. The football and hockey players were probably more hostile and aggressive to start with than the swimmers.

Which of the following, if true, would most strengthen the conclusion drawn by the psychological researchers?

- (A) The football and hockey players became more hostile and aggressive during the season and remained so during the off-season, whereas there was no increase in aggressiveness among the swimmers.
- (B) The football and hockey players, but not the swimmers, were aware at the start of the experiment that they were being tested for aggressiveness.
- (C) The same psychological research indicated that the football and hockey players had a great respect for cooperation and team play, whereas the swimmers were most concerned with excelling as individual competitors.
- (D) The research studies were designed to include no college athletes who participated in both contact and noncontact sports.
- (E) Throughout the United States, more incidents of fan violence occur at baseball games than occur at hockey or football games.

6. Ross: The profitability of Company X, restored to private ownership five years ago, is clear evidence that businesses will always fare better under private than under public ownership.

Julia: Wrong. A close look at the records shows that X has been profitable since the appointment of a first-class manager, which happened while X was still in the public sector.

Which of the following best describes the weak point in Ross's claim on which Julia's response focuses?

- (A) The evidence Ross cites comes from only a single observed case, that of Company X.
- (B) The profitability of Company X might be only temporary.
- (C) Ross's statement leaves open the possibility that the cause he cites came after the effect he attributes to it.
- (D) No mention is made of companies that are partly government owned and partly privately owned.
- (E) No exact figures are given for the current profits of Company X.

7. Stronger patent laws are needed to protect inventions from being pirated. With that protection, manufacture would be encouraged to invest in the development of new products and technologies. Such investment frequently results in an increase in a manufacturer's productivity.

Which of the following conclusions can most properly be drawn from the information above?

- (A) Stronger patent laws tend to benefit financial institutions as well as manufacturers.
- (B) Increased productivity in manufacturing is likely to be accompanied by the creation of more manufacturing jobs.
- (C) Manufacturers will decrease investment in the development of new products and technologies unless there are stronger patent laws.
- (D) The weakness of current patent laws has been a cause of economic recession.
- (E) Stronger patent laws would stimulate improvement in productivity for many manufacturers.

8. Which of the following best completes the passage below?

At large amusement parks, live shows are used very deliberately to influence crowd movements. Lunchtime performances relieve the pressure on a park's restaurants. Evening performances have a rather different purpose: encourage visitors to stay for supper. Behind this surface divergence in immediate purpose there is the unified underlying goal of —————.

- (A) keeping the lines at the various rides short by drawing off part of the crowd
- (B) enhancing revenue by attracting people who come only for the live shows and then leave the park
- (C) avoiding as far as possible traffic jams caused by visitors entering or leaving the park
- (D) encouraging as many people as possible to come to the park in order to eat at the restaurants
- (E) utilizing the restaurants at optimal levels for as much of the day as possible

9. James weighs more than Kelly.  
Luis weighs more than Mark.  
Mark weighs less than Ned.  
Kelly and Ned are exactly the same weight.

If the information above is true, which of the following must also be true?

- (A) Luis weighs more than Ned.
- (B) Luis weighs more than James.
- (C) Kelly weighs less than Luis.
- (D) James weighs more than Mark.
- (E) Kelly weighs less than Mark.

Questions 10-11 are based on the following.

Partly because of bad weather, but also partly because some major pepper growers have switched to high-priced cocoa, world production of pepper has been running well below worldwide sales for three years. Pepper is consequently in relatively short supply. The price of pepper has soared in response: it now equals that of cocoa.

10. Which of the following can be inferred from the passage?
- (A) Pepper is a profitable crop only if it is grown on a large scale.
  - (B) World consumption of pepper has been unusually high for three years.
  - (C) World production of pepper will return to previous levels once normal weather returns.
  - (D) Surplus stocks of pepper have been reduced in the past three years.
  - (E) The profits that the growers of pepper have made in the past three years have been unprecedented.
11. Some observers have concluded that the rise in the price of pepper means that the switch by some growers from pepper to cocoa left those growers no better off than if none of them had switched; this conclusion, however, is unwarranted because it can be inferred to be likely that
- (A) those growers could not have foreseen how high the price of pepper would go
  - (B) the initial cost involved in switching from pepper to cocoa is substantial
  - (C) supplies of pepper would not be as low as they are if those growers had not switched crops
  - (D) cocoa crops are as susceptible to being reduced by bad weather as are pepper crops
  - (E) as more growers turn to growing cocoa, cocoa supplies will increase and the price of cocoa will fall precipitously

12. Using computer techniques, researchers analyze layers of paint that lie buried beneath the surface layers of old paintings. They claim, for example, that additional mountainous scenery once appeared in Leonardo da Vinci's *Mona Lisa*, which was later painted over. Skeptics reply to these claims, however, that X-ray examinations of the *Mona Lisa* do not show hidden mountains.

Which of the following, if true, would tend most to weaken the force of the skeptics' objections?

- (A) There is no written or anecdotal record that Leonardo da Vinci ever painted over major areas of his *Mona Lisa*.
  - (B) Painters of da Vinci's time commonly created images of mountainous scenery in the backgrounds of portraits like the *Mona Lisa*.
  - (C) No one knows for certain what parts of the *Mona Lisa* may have been painted by da Vinci's assistants rather than by da Vinci himself.
  - (D) Infrared photography of the *Mona Lisa* has revealed no trace of hidden mountainous scenery.
  - (E) Analysis relying on X-rays only has the capacity to detect lead-based white pigments in layers of paint beneath a painting's surface layers.
13. While Governor Verdant has been in office, the state's budget has increased by an average of 6 percent each year. While the previous governor was in office, the state's budget increased by an average of 11½ percent each year. Obviously, the austere budgets during Governor Verdant's term have caused the slowdown in the growth in state spending.
- Which of the following, if true, would most seriously weaken the conclusion drawn above?
- (A) The rate of inflation in the state averaged 10 percent each year during the previous governor's term in office and 3 percent each year during Verdant's term.
  - (B) Both federal and state income tax rates have been lowered considerably during Verdant's term in office.
  - (C) In each year of Verdant's term in office, the state's budget has shown some increase in spending over the previous year.
  - (D) During Verdant's term in office, the state has either discontinued or begun to charge private citizens for numerous services that the state offered free to citizens during the previous governor's term.
  - (E) During the previous governor's term in office, the state introduced several so-called "austerity" budgets intended to reduce the growth in state spending.

14. Federal agricultural programs aimed at benefiting one group whose livelihood depends on farming often end up harming another such group.

Which of the following statements provides support for the claim above?

- I. An effort to help feed-grain producers resulted in higher prices for their crops, but the higher prices decreased the profits of livestock producers.
- II. In order to reduce crop surpluses and increase prices, growers of certain crops were paid to leave a portion of their land idle, but the reduction was not achieved because improvements in efficiency resulted in higher production on the land in use.
- III. Many farm workers were put out of work when a program meant to raise the price of grain provided grain growers with an incentive to reduce production by giving them surplus grain from government reserves.

- (A) I, but not II and not III
- (B) II, but not I and not III
- (C) I and III, but not II
- (D) II and III, but not I
- (E) I, II, and III

15. Technological education is worsening. People between eighteen and twenty-four, who are just emerging from their formal education, are more likely to be technologically illiterate than somewhat older adults. And yet, issues for public referenda will increasingly involve aspects of technology.

Which of the following conclusions can be properly drawn from the statements above?

- (A) If all young people are to make informed decisions on public referenda, many of them must learn more about technology.
- (B) Thorough studies of technological issues and innovations should be made a required part of the public and private school curriculum.
- (C) It should be suggested that prospective voters attend applied science courses in order to acquire a minimal competency in technical matters.
- (D) If young people are not to be overly influenced by famous technocrats, they must increase their knowledge of pure science.
- (E) On public referenda issues, young people tend to confuse real or probable technologies with impossible ideals.

16. In a political system with only two major parties, the entrance of a third-party candidate into an election race damages the chances of only one of the two major candidates. The third-party candidate always attracts some of the voters who might otherwise have voted for one of the two major candidates, but not voters who support the other candidate. Since a third-party candidacy affects the two major candidates unequally, for reasons neither of them has any control over, the practice is unfair and should not be allowed.

If the factual information in the passage above is true, which of the following can be most reliably inferred from it?

- (A) If the political platform of the third party is a compromise position between that of the two major parties, the third party will draw its voters equally from the two major parties.
- (B) If, before the emergence of a third party, voters were divided equally between the two major parties neither of the major parties is likely to capture much more than one-half of the vote.
- (C) A third-party candidate will not capture the votes of new voters who have never voted for candidates of either of the two major parties.
- (D) The political stance of a third party will be more radical than that of either of the two major parties.
- (E) The founders of a third party are likely to be a coalition consisting of former leaders of the two major parties.

17. Companies considering new cost-cutting manufacturing processes often compare the projected results of making the investment against the alternative of not making the investment with costs, selling prices, and share of market remaining constant.

Which of the following, assuming that each is a realistic possibility, constitutes the most serious disadvantage for companies of using the method above for evaluating the financial benefit of new manufacturing processes?

- (A) The costs of materials required by the new process might not be known with certainty.
- (B) In several years interest rates might go down, reducing the interest costs of borrowing money to pay for the investment.
- (C) Some cost-cutting processes might require such expensive investments that there would be no net gain for many years, until the investment was paid for by savings in the manufacturing process.
- (D) Competitors that do invest in a new process might reduce their selling prices and thus take market share away from companies that do not.
- (E) The period of year chosen for averaging out the cost of the investment might be somewhat longer or shorter, thus affecting the result.

18. There are far fewer children available for adoption than there are people who want to adopt. Two million couples are currently waiting to adopt, but in 1982, the last year for which figures exist, there were only some 50,000 adoptions.

Which of the following statements, if true, most strengthens the author's claim that there are far fewer children available for adoption than there are people who want to adopt?

- (A) The number of couples waiting to adopt has increased significantly in the last decade.
- (B) The number of adoptions in the current year is greater than the number of adoptions in any preceding year.
- (C) The number of adoptions in a year is approximately equal to the number of children available for adoption in that period.
- (D) People who seek to adopt children often go through a long process of interviews and investigation by adoption agencies.
- (E) People who seek to adopt children generally make very good parents.

Questions 19-20 are based on the following.

Archaeologists seeking the location of a legendary siege and destruction of a city are excavating in several possible places, including a middle and a lower layer of a large mound. The bottom of the middle layer contains some pieces of pottery of type 3, known to be from a later period than the time of the destruction of the city, but the lower layer does not.

19. Which of the following hypotheses is best supported by the evidence above?

- (A) The lower layer contains the remains of the city where the siege took place.
- (B) The legend confuses stories from two different historical periods.
- (C) The middle layer does not represent the period of the siege.
- (D) The siege lasted for a long time before the city was destroyed.
- (E) The pottery of type 3 was imported to the city by traders.

20. The force of the evidence cited above is most seriously weakened if which of the following is true?

- (A) Gerbils, small animals long native to the area, dig large burrows into which objects can fall when the burrows collapse.
- (B) Pottery of types 1 and 2, found in the lower level, was used in the cities from which, according to the legend, the besieging forces came.
- (C) Several pieces of stone from a lower-layer wall have been found incorporated into the remains of a building in the middle layer.
- (D) Both the middle and the lower layer show evidence of large-scale destruction of habitations by fire.
- (E) Bronze axheads of a type used at the time of the siege were found in the lower level of excavation.

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



## Practices for GMAT Book 1

### SECTION 6.

30 Minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise choose one of the others. Select the best version and fill in the corresponding oval on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence; this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. Researchers at Cornell University have demonstrated that homing pigeons can sense changes in the earth's magnetic field, see light waves that people cannot see, detect low-frequency sounds from miles away, sense changes in air pressure, and can identify familiar odors.
  - (A) sense changes in air pressure, and can identify familiar odors
  - (B) can sense changes in air pressure, and can identify familiar odors
  - (C) sense changes in air pressure, and identify familiar odors
  - (D) air pressure changes can be sensed, and familiar odors identified
  - (E) air pressure changes are sensed, and familiar odors identified
2. In ancient times, Nubia was the principal corridor where there were cultural influences transmitted between Black Africa and the Mediterranean basin.
  - (A) where there were cultural influences transmitted
  - (B) through which cultural influences were transmitted
  - (C) where there was a transmission of cultural influences
  - (D) for the transmitting of cultural influences
  - (E) which was transmitting cultural influences
3. It is a special feature of cell aggregation in the developing nervous system that in most regions of the brain the cells not only adhere to one another and also adopt some preferential orientation.
  - (A) to one another and also adopt
  - (B) one to the other, and also they adopt
  - (C) one to the other, but also adopting
  - (D) to one another but also adopt
  - (E) to each other, also adopting
4. Among the reasons for the decline of New England agriculture in the last three decades were the high cost of land, the pressure of housing and commercial development, and basing a marketing and distribution system on importing produce from Florida and California.
  - (A) basing a marketing and distribution system on importing produce from Florida and California
  - (B) basing a marketing and distribution system on the imported produce of Florida and California
  - (C) basing a system of marketing and distribution on the import of produce from Florida and California
  - (D) a marketing and distribution system based on importing produce from Florida and California
  - (E) a marketing and distribution system importing produce from Florida and California as its base

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**Practices for GMAT Book 1**

5. Like Byron at Missolonghi, Jack London was slowly killed by the mistakes of the medical men who treated him.
- (A) Like Byron
  - (B) Like Byron's death
  - (C) Just as Byron died
  - (D) Similar to Byron
  - (E) As did Byron
6. One of every two new businesses fail within two years.
- (A) fail
  - (B) fails
  - (C) should fail
  - (D) may have failed
  - (E) has failed
7. Even today, a century after Pasteur developed the first vaccine, rabies almost always kills its victims unless inoculated in the earliest stages of the disease.
- (A) its victims unless inoculated
  - (B) its victims unless they are inoculated
  - (C) its victims unless inoculation is done
  - (D) the victims unless there is an inoculation
  - (E) the victims unless inoculated
8. In a period of time when women typically have had a narrow range of choices, Mary Baker Eddy became a distinguished writer and the founder, architect, and builder of a growing church.
- (A) In a period of time when women typically have
  - (B) During a time in which typically women have
  - (C) Typically, during a time when women
  - (D) At a time when women typically
  - (E) Typically in a time in which women
9. As the price of gasoline rises, which makes substituting alcohol distilled from cereal grain attractive, the prices of bread and livestock feed are sure to increase.
- (A) which makes substituting alcohol distilled from cereal grain attractive
  - (B) which makes substituting the distillation of alcohol from cereal grain attractive
  - (C) which makes distilling alcohol from cereal grain an attractive substitute
  - (D) making an attractive substitution of alcohol distilled from cereal grain
  - (E) making alcohol distilled from cereal grain an attractive substitute
10. Climatic shifts are so gradual as to be indistinguishable at first from ordinary fluctuations in the weather.
- (A) so gradual as to be indistinguishable
  - (B) so gradual they can be indistinguishable
  - (C) so gradual that they are unable to be distinguished
  - (D) gradual enough not to be distinguishable
  - (E) gradual enough so that one cannot distinguish them
11. Although the lesser cornstalk borer is widely distributed, control of them is necessary only in the South.
- (A) the lesser cornstalk borer is widely distributed, control of them is
  - (B) widely distributed, measures to control the lesser cornstalk borer are
  - (C) widely distributed, lesser cornstalk borer control is
  - (D) the lesser cornstalk borer is widely distributed, measures to control it are
  - (E) it is widely distributed, control of the lesser cornstalk borer is

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12. Traveling the back roads of Hungary, in 1905 Béla Bartók and Zoltán Kodály began their pioneering work in ethnomusicology, and they were armed only with an Edison phonograph and insatiable curiosity.
- (A) Traveling the back roads of Hungary, in 1905 Béla Bartók and Zoltán Kodály began their pioneering work in ethnomusicology, and they were armed only
  - (B) In 1905, Béla Bartók and Zoltán Kodály, traveling the back roads of Hungary, began their pioneering work in ethnomusicology, and they were only armed
  - (C) In 1905 Béla Bartók and Zoltán Kodály began their pioneering work in ethnomusicology, traveling the back roads of Hungary armed only
  - (D) Having traveled the back roads of Hungary, in 1905 Béla Bartók and Zoltán Kodály began their pioneering work in ethnomusicology; they were only armed
  - (E) Béla Bartók and Zoltán Kodály, in 1905 began their pioneering work in ethnomusicology, traveling the back roads of Hungary, arming themselves only
13. It is as difficult to prevent crimes against property as those that are against a person.
- (A) those that are against a
  - (B) those against a
  - (C) it is against a
  - (D) preventing those against a
  - (E) it is to prevent those against a
14. Unlike the acid smoke of cigarettes, pipe tobacco, cured by age-old methods, yields an alkaline smoke too irritating to be drawn into the lungs.
- (A) Unlike the acid smoke of cigarettes, pipe tobacco, cured by age-old methods, yields an alkaline smoke
  - (B) Unlike the acid smoke of cigarettes, pipe tobacco is cured by age-old methods, yielding an alkaline smoke
  - (C) Unlike cigarette tobacco, which yields an acid smoke, pipe tobacco, cured by age-old methods, yields an alkaline smoke
  - (D) Differing from cigarettes' acid smoke, pipe tobacco's alkaline smoke, cured by age-old methods, is
  - (E) The alkaline smoke of pipe tobacco differs from cigarettes' acid smoke in that it is cured by age-old methods and is
15. Joplin's faith in his opera "Tremonisha" was unshakeable; in 1911 he published the score at his own expense and decided on staging it himself.
- (A) on staging it himself
  - (B) that he himself would do the staging
  - (C) to do the staging of the work by himself
  - (D) that he himself would stage it
  - (E) to stage the work himself
16. Los Angeles has a higher number of family dwellings per capita than any large city.
- (A) a higher number of family dwellings per capita than any large city
  - (B) higher numbers of family dwellings per capita than any other large city
  - (C) a higher number of family dwellings per capita than does any other large city
  - (D) higher numbers of family dwellings per capita than do other large cities
  - (E) a high per capita number of family dwellings, more than does any other large city

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17. During the nineteenth century Emily Eden and Fanny Parks journeyed throughout India, sketching and keeping journals forming the basis of news reports about the princely states where they had visited.
- (A) forming the basis of news reports about the princely states where they had
  - (B) that were forming the basis of news reports about the princely states
  - (C) to form the basis of news reports about the princely states which they have
  - (D) which had formed the basis of news reports about the princely states where they had
  - (E) that formed the basis of news reports about the princely states they
18. School integration plans that involve busing between suburban and central-city areas have contributed, according to a recent study, to significant increases in housing integration, which, in turn, reduces any future need for busing.
- (A) significant increases in housing integration, which, in turn, reduces
  - (B) significant integration increases in housing, which, in turn, reduces
  - (C) increase housing integration significantly, which, in turn, reduces
  - (D) increase housing integration significantly, in turn reducing
  - (E) significantly increase housing integration, which, in turn, reduce
19. The commission acknowledged that no amount of money or staff members can ensure the safety of people who live in the vicinity of a nuclear plant, but it approved the installation because it believed that all reasonable precautions had been taken.
- (A) no amount of money or staff members
  - (B) neither vast amounts of money nor staff members
  - (C) neither vast amounts of money nor numbers of staff members
  - (D) neither vast amounts of money nor a large staff
  - (E) no matter how large the staff or how vast the amount of money
20. Sartre believed each individual is responsible to choose one course of action over another one, that it is the choice that gives value to the act, and that nothing that is not acted upon has value.
- (A) each individual is responsible to choose one course of action over another one
  - (B) that each individual is responsible for choosing one course of action over another
  - (C) that each individual is responsible, choosing one course of action over another
  - (D) that each individual is responsible to choose one course of action over the other
  - (E) each individual is responsible for choosing one course of action over other ones
21. While the owner of a condominium apartment has free and clear title to the dwelling, owners of cooperative apartments have shares in a corporation that owns a building and leases apartments to them.
- (A) While the owner of a condominium apartment has free and clear title to the dwelling,
  - (B) The owner of a condominium apartment has free and clear title to the dwelling, but
  - (C) Whereas owners of condominium apartments have free and clear title to their dwellings,
  - (D) An owner of a condominium apartment has free and clear title to the dwelling, whereas
  - (E) Condominium apartment owners have a title to their dwelling that is free and clear, while

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**Practices for GMAT Book 1**

22. Although films about the American West depict coyotes as solitary animals howling mournfully on the tops of distant hills, in reality these gregarious creatures live in stable groups that occupy the same territory for long periods.
- (A) films about the American West depict coyotes as solitary animals howling mournfully on the tops of distant hills
  - (B) in films about the American West coyotes are depicted to be solitary animals that howl mournfully on the tops of distant hills
  - (C) coyotes are depicted as solitary animals howling mournfully on the tops of distant hills in films about the American West
  - (D) films about the American West depict coyotes as if they were solitary, mournfully howling animals on the tops of distant hills
  - (E) films about the American West depict coyotes to be solitary and mournfully howling animals on the tops of distant hills
23. In 1980 the United States exported twice as much of its national output of goods as they had in 1970.
- (A) twice as much of its national output of goods as they had
  - (B) double the amount of their national output of goods as they did
  - (C) twice as much of its national output of goods as it did
  - (D) double the amount of its national output of goods as it has
  - (E) twice as much of their national output of goods as they had
24. Even though its per capita food supply hardly increased during two decades, stringent rationing and planned distribution have allowed the People's Republic of China to ensure nutritional levels of 2,000 calories per person per day for its population.
- (A) Even though its per capita food supply hardly increased during
  - (B) Even though its per capita food supply has hardly increased in
  - (C) Despite its per capita food supply hardly increasing over
  - (D) Despite there being hardly any increase in its per capita food supply during
  - (E) Although there is hardly any increase in per capita food supply for
25. Few people realize that the chance of accidental injury or death may be as great or greater in the "safety" of their own homes than in a plane or on the road.
- (A) may be as great or greater in the "safety" of their own homes than
  - (B) is at least as great or greater in the "safety" of their own homes than
  - (C) might be so great or greater in the "safety" of their own home as
  - (D) may be at least as great in the "safety" of their own homes as
  - (E) can be at least so great in the "safety" of their own home as

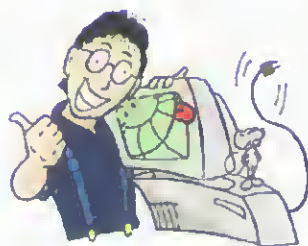
**S T O P**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Practices for GMAT

## Book 1

# Test 6



## Practices for GMAT Book 1

### SECTION 1

Time—30 minutes

25 Questions

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question and blacken the corresponding space on the answer sheet. Answer all questions following a passage on the basis of what is stated or implied in that passage.

Fireflies use flash (photic) signals to locate and to court sexual partners. The flash is produced by the lantern of specialized photogenic tissue located in the abdomen. The flash code varies among firefly species in a number of ways, including the male's flash duration, the duration of the interval between the male's flashes, and the length of the delay period (latency) between the male's flash signal and the female's answering flash. During search, it is typical for the flying male to emit his flash pattern while crisscrossing an area, and for a nearby stationary female of the same species to answer with flashes at the species-specific latency that enables the male to "recognize" an answer. If recognition occurs, courtship begins: the male hovers in flight and orients his lantern toward the female, often dimming his flashes to locate her more precisely. Eventually he lands and proceeds on foot, periodically emitting the appropriate flash pattern and receiving answers until they meet and copulate.

A common belief among biologists is that, for any species of firefly, the flash code remains invariant as search-courtship proceeds. If this were true, it would mean that the firefly exhibits no behavioral plasticity in its flash code. But Lloyd (1969) observed one species in Maryland and New Jersey in which the male, after receiving an answer, shifts from emitting single flashes at even intervals to a more complex rhythm in which closely paired flashes replace the single flashes. In our own research on the same species on Long Island, we also observed that search and courtship differ in this way, but differ as well in the duration of the male's flash interval, providing further evidence for behavioral plasticity. For instance, at 20° C the interval between the single search flashes averaged 2.60 seconds, whereas that between the sets of paired courtship flashes averaged 2.32 seconds. Typically, each male flash emitted at the search interval was answered by females, but females answered only after the second of the closely paired flashes emitted by males at the courtship interval. Using artificial male flashes, we have shown that the female's "decision" on whether to respond to the single or to the closely paired sets of flashes is determined by the male's flash interval.

Behavioral plasticity is also evident in the analogous signal systems of some other insects. For example, the male cricket chirps a calling song during search and a different song during courtship. However, the cricket's acoustical code exhibits behavioral plasticity to a lesser degree because only the male signals acoustically, and he is limited to changing from one stereotyped song to

another. In some and perhaps all firefly species, both sexes rapidly exchange information, each altering its response on detecting a specific feature of the partner's signal.

1. In the second and third paragraphs, the author is primarily concerned with
  - (A) reconciling two apparently conflicting views
  - (B) presenting evidence that counters a common belief
  - (C) questioning the reliability of widely accepted evidence
  - (D) showing how recent evidence bears on a long-standing controversy
  - (E) describing the sole exceptions to an otherwise valid generalization
2. It can be inferred from the passage that, within any firefly species, the two sexual partners characteristically
  - (A) emit closely paired flashes, but only during courtship
  - (B) answer the photic signals emitted by the members of several species, but only during search
  - (C) mate after an exchange of photic information that has enabled them to meet
  - (D) exchange photic information more rapidly during search than during courtship
  - (E) move on foot toward each other before they meet
3. The author suggests that the species of firefly that he studied in his investigation is
  - (A) not the only firefly species having a flash code that exhibits behavioral plasticity
  - (B) probably not the same firefly species observed by Lloyd
  - (C) atypical of firefly species with regard to the female's ability to shift her photic signal pattern
  - (D) governed by the same flash code as any firefly species that exhibits behavioral plasticity
  - (E) the only firefly species that has been scientifically observed on Long Island as well as in Maryland and New Jersey

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4. The author implies that which of the following negates the view that the search-courtship flash code remains invariant?
  - (A) Each species of firefly has its own distinctive flash code.
  - (B) A male firefly is capable of recognizing the photic signal of a female of the male's species.
  - (C) The male firefly is capable of dimming his flashes in order to better locate the female.
  - (D) During courtship the male firefly shifts from hovering in flight to proceeding on the ground.
  - (E) The male's photic signal pattern changes in a regular way between search and courtship.
5. The author most probably discusses the cricket's search-courtship signal system for which of the following reasons?
  - (A) To illustrate an insect signal system that is totally unlike that of the firefly
  - (B) To complete his argument that rapid information exchange is extremely common within all insect species
  - (C) To provide a reference point for evaluating the degree of behavioral plasticity evident in the firefly's signal system
  - (D) To make the point that a photic signal system is more effective in propagating an insect species than is an acoustical signal system
  - (E) To contrast the communication systems of fireflies and crickets with regard to the male's ability to shift from one signal pattern to another
6. It can be inferred from the passage that which of the following conclusions can properly be drawn solely from the observations reported by Lloyd in 1969?
  - (A) The firefly populations of Maryland and New Jersey exhibit less behavioral plasticity than does the firefly population of Long Island.
  - (B) The firefly's flash code exhibits greater behavioral plasticity than does the cricket's acoustical code.
  - (C) In at least one firefly species, the male firefly's flash intervals are more rhythmic during search than during courtship.
  - (D) In a species of firefly, the male's flash pattern exhibits at least one feature of a behaviorally plastic flash code.
  - (E) In the firefly species observed by Lloyd, the female's flash pattern exhibits exactly one species-specific feature.
7. Which of the following best expresses the author's main point?
  - (A) The conclusion that the search-courtship flash codes of all firefly species lack behavioral plasticity can be doubted but not rejected on the basis of the available evidence.
  - (B) Firefly species vary in the extent to which their search-courtship communication systems exhibit behavioral plasticity.
  - (C) There is support for the view that the firefly's search-courtship signal system exhibits considerable behavioral plasticity.
  - (D) A change in the behavioral situation impairs the flash code of at least one species of firefly.
  - (E) The firefly's search-courtship signals are more subject to random fluctuations than are the analogous signals of most other insects.
8. The author's study indicated which of the following regarding the paired courtship flashes in a species of firefly?
  - (A) The two flashes are of different intensities.
  - (B) The two flashes have different durations.
  - (C) The average time interval between the two flashes changes after the male has landed.
  - (D) The male does not receive an answer to the first of the two flashes.
  - (E) The first of the two flashes is not detected by the female.
9. Which of the following, if true, would best serve as a basis for broadening the scope of the author's conclusion regarding the behavioral plasticity of the firefly's photic signal system?
  - (A) Several recently identified firefly species differ with regard to their flash intensities.
  - (B) Thermal conditions influence the length of the latency period between the male's signal and the female's answering signal.
  - (C) There is a specific neural mechanism that enables the male to dim his flashes.
  - (D) During search, an answering female may be located in the underbrush, on a bush, or on a tree.
  - (E) Soon after mating, the female of a species preys on males of a different species by imitating the female flash pattern of that species.

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Initially there was confusion among the first English colonists about the purpose and character of their colonies in North America. Most who embarked for the colonies expected to return to England. Furthermore, the colonizers were often unclear as to whether they intended primarily to establish centers for trade with the Native Americans or to create bases for pirateering against Spanish treasure ships.

- (5) Sir Walter Raleigh's enterprise is representative of early English colonization in North America. He held the patent (proprietary right granted by the English king) for Virginia, which at the time meant the entire Eastern coast of North America, and the Roanoke colonies were his ventures. His primary goal, like that of all colonial promoters, was to make money, but he was also in search of glory for himself and for England. Individual promoters such as Raleigh and Sir Humphrey Gilbert evoke the stereotypical image of the swashbuckling Elizabethan who contributed to England's prestige by individual exploits of daring and skill, but this type of leadership was not characteristic of the successful English colony. Indeed, John White, the leader of Raleigh's last colony at Roanoke, believed that the diversions of pirateering helped to kill the colony. It soon became clear to the English that colonization required such massive initial investment that a small group led by an individual did not have sufficient resources, especially when the colonies required infusions of funds over several years. Joint-stock companies, organizations in which people bought shares, were formed to provide this steady aid.

- The Virginia Company of London was the first and most famous of these joint-stock companies for colonization. National prestige was a strong motive for the investors, but they also expected to reap a steady income from their shares. In the early years, however, few prospered. The Virginia Company included many members of the gentry and the nobility who were often given shares and high offices simply because of their aristocratic backgrounds. Unlike the capitalist merchants, who provided most of the money, the aristocrats were selected because they would lend prestige to the venture and because they alone had access to those members of the king's court who actually issued patents on territory and controlled colonial policies.

- These joint-stock companies, technically capitalist organizations, seem modern; nevertheless, care must be taken not to overemphasize the modernity of economic venture in England at this time. The king's court controlled the economy because the king used monopolies of the manufacture or importation of vital products to reward those he favored. This stratagem resulted in a constriction of economic opportunity for those well-to-do people (not members of the gentry or nobility themselves) who might have used investment as their way to greater wealth.

10. The primary purpose of the passage is to
- (A) explain Sir Walter Raleigh's historical role in the English colonization of North America
  - (B) contrast the structure of joint-stock companies with that of modern corporations
  - (C) portray the hardships experienced by many of the early English colonizers of North America
  - (D) argue that pirateering was detrimental to England's political self-interest during the period of North American colonization
  - (E) describe the historical context in which joint-stock companies developed during the English colonial enterprise in North America
11. According to the passage, which of the following was true of English "colonial promoters" (line 15) during the period discussed?
- (A) They were all unified in support of the objectives of the colonies.
  - (B) They were all glamorous and individualistic people.
  - (C) They all supported piracy against the Spanish.
  - (D) They all contributed significant personal wealth to their ventures.
  - (E) They all undertook their ventures primarily to make money.
12. According to the passage, investors in joint-stock companies such as the Virginia Company of London were motivated by which of the following factors?
- I. Patriotism
  - II. Hope for individual glory
  - III. Desire for economic gain
- (A) I only
  - (B) III only
  - (C) I and III only
  - (D) II and III only
  - (E) I, II, and III

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**Practices for GMAT Book 1**

13. According to the passage, one reason members of the nobility gained influence in joint-stock companies was that middle-class merchants
- (A) wanted military protection from Spanish pirates
  - (B) lacked access to the king and his court
  - (C) lacked expertise in large-scale economic ventures
  - (D) had an undue regard for purely formal social status
  - (E) had borrowed considerable amounts of money from them for previous ventures
14. The passage states that the earliest English colonists in North America generally expected to
- (A) return to England after their stay in the colonies
  - (B) become members of an aristocracy in North America
  - (C) receive strong economic support from the English government
  - (D) establish plantations for trade with England
  - (E) create self-supporting communities independent of England
15. The passage implies which of the following about joint-stock companies?
- (A) They were made possible for the first time by the colonization of North America.
  - (B) They were ineffectual because the investors did not share the same motives.
  - (C) They were merely formal organizations lacking both money and power.
  - (D) They were necessary to the prosperity of the English colonial enterprise in North America.
  - (E) They were created to limit the wealth of capitalist merchants.
16. It can be inferred from the passage that joint-stock companies were not entirely modern because
- (A) they were not primarily involved in the manufacture of goods
  - (B) they were restricted by the power of the king and the nobility
  - (C) most of them had monopolistic control of a market or a profit
  - (D) few of them realized the profits their investors expected
  - (E) some of them were composed almost entirely of middle-class merchants
17. The author implies that which of the following contributed to the failure of Sir Walter Raleigh's Roanoke colonies?
- I. His policy of piracy against the Spanish treasure ships
  - II. His lack of strong financial backing
  - III. His lack of knowledge about the environment in North America
- (A) I only
  - (B) III only
  - (C) I and II only
  - (D) I and III only
  - (E) I, II, and III
- GO ON TO THE NEXT PAGE.

In contemporary autobiographical works by Black Americans, experiments in imaginative prose appear almost as frequently as traditional historical chronology. Any well-crafted autobiography is

- (5) inevitably literary because it contains a special kind of historical narrative, one that combines imagination with memory. This is true even when the personal history focuses on chronology and factual detail and such "eventfulness" of the text makes its artistry less
- (10) apparent. However, the life experiences of a number of Black autobiographers have inspired an approach to storytelling that goes beyond the limits of the standard historical narrative. In one common form an important figure, such as Nate Shaw, collaborates with a coauthor
- (15) to produce a vernacular narrative that captures an authentic speaking voice. Another common form is the novelistic narrative, often the creation of literary artists such as James Baldwin.

- Of special interest is the fact that such forms also are
- (20) evident in the autobiographies of some prominent figures who, for good reason, but perhaps contrary to expectation, have not chosen to unfold their respective stories within the usual chronological framework. A case in point is the *Autobiography of W. E. B. Du Bois*,
- (25) completed in 1960 when the Black sociologist and leader was over ninety and a voluntary exile in Ghana.

The opening chapters of Du Bois' *Autobiography* report impressions of his latest trip across Europe and Asia—the fifteenth journey of a peripatetic career.

- (30) What follows is an account of his recently changed view of society, a change that occurred, he asserts, as a result not only of his latest tour, but also of the trips that had preceded it. Only after these factors are set forth does the narrator return, via the cities of Prague, Moscow,
- (35) and Peking, to the beginning: his birthplace "by a golden river and in the shadow of two great hills" in Great Barrington, Massachusetts. These dislocations in chronological time convey Du Bois' image of his life as a long spiral. The line is traced by the successive journeys that often traverse terrain previously covered.
- (40) These returns signify continuity and repetition, just as Du Bois' experiences as a Black American did not change in some fundamental respects. Yet the line also wavers in response to new historical forces, sweeping
- (45) him and almost everyone else along on an altered path. Du Bois sees history as both cyclical and linear, and much of the force of the *Autobiography* derives from this dual outlook, expressed in the imagery of the traveler. By contrast, Du Bois remarks that in his earlier
- (50) writings, "the content rather than the form was to me of prime importance." But now the aged writer has found the right narrative style for expressing the truth he lived for nearly a century.

18. Which of the following would be the most appropriate title for the passage?

- (A) Literary Qualities Seldom Found in Autobiographies  
(B) Cultural Variations Among Traditional Historical Chronologies  
(C) Contrasts Among Historical Views of Black Autobiographers  
(D) Narrative Styles in the Autobiographies of Contemporary Black Americans  
(E) Origins of Narrative Forms Refined by Contemporary Black American Autobiographers

19. The author develops his topic by

- (A) noting the origins of a distinction and questioning its contemporary value  
(B) explaining an assertion and providing illustrative examples  
(C) presenting the implications of a paradox and evaluating their importance  
(D) revealing the internal inconsistencies of a position and formulating a more coherent position  
(E) offering an alternative conclusion and supporting that alternative

20. According to the passage, Du Bois described his life in terms of which of the following?

- I. Continuity  
II. Repetition  
III. Change

- (A) I only  
(B) II only  
(C) I and II only  
(D) I and III only  
(E) I, II, and III

21. The author implies that the life experiences of a number of Black autobiographers led them to do which of the following?

- (A) Conclude that the well-crafted autobiography is inevitably literary  
(B) Challenge the belief that Du Bois' *Autobiography* is structured chronologically  
(C) Adopt the style used by Du Bois in his earliest writing  
(D) Question whether autobiography is a special kind of historical narrative  
(E) Experiment with the techniques of fiction in their autobiographical writing

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## Practices for GMAT Book 1

22. The author expressly names each of the following places EXCEPT
- (A) the town where Du Bois was born
  - (B) the city in which Du Bois started writing his autobiography
  - (C) the country where Du Bois became a voluntary exile
  - (D) two continents that Du Bois crossed during the fifteenth journey of his career
  - (E) several national capitals to which Du Bois journeyed
23. Of the following, which best describes the author's attitude toward autobiographies that extend "beyond the limits of the standard historical narrative" (lines 12-13)?
- (A) acceptance
  - (B) indifference
  - (C) ambivalence
  - (D) impatience
  - (E) condescension
24. The author states that Du Bois' *Autobiography* reveals which of the following about the narrator?
- (A) He sensed that his life experiences had been very different from those of most Black Americans.
  - (B) He had recently formulated an entirely original sociological thesis.
  - (C) He had subordinated his lifelong interest in history to his emerging interest in literature.
  - (D) He felt that his life had been fundamentally altered by historical forces.
  - (E) He thought that he was the first American writer to exploit literary techniques in an autobiographical narrative.
25. The author implies that it was only in Du Bois' later years that Du Bois did which of the following?
- (A) Consciously perfected the expressive style that he began to develop as a young writer.
  - (B) Exploited the expressive possibilities of narrative form.
  - (C) Evaluated the significance of his accomplishments as a Black leader.
  - (D) Revisited his birthplace.
  - (E) Transcended his desire to formulate a coherent view of history.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 2

Time—30 minutes

25 Questions

**Directions:** Each of the data sufficiency problems below consists of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. Using the data given in the statements plus your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you are to fill in the corresponding oval

- A if statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient to answer the question asked;
- B if statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient to answer the question asked;
- C if **BOTH** statements (1) and (2) **TOGETHER** are sufficient to answer the question asked, but **NEITHER** statement **ALONE** is sufficient;
- D if **EACH** statement **ALONE** is sufficient to answer the question asked;
- E if statements (1) and (2) **TOGETHER** are **NOT** sufficient to answer the question asked, and additional data specific to the problem are needed.

**Numbers:** All numbers used are real numbers.

**Figures:** A figure in a data sufficiency problem will conform to the information given in the question, but will not necessarily conform to the additional information given in statements (1) and (2).

You may assume that lines shown as straight are straight and that angle measures are greater than zero.

You may assume that the position of points, angles, regions, etc., exist in the order shown.

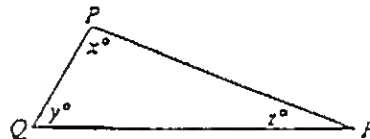
All figures lie in a plane unless otherwise indicated.

**Example:**

In  $\triangle PQR$ , what is the value of  $x$ ?

(1)  $PQ = PR$

(2)  $y = 40$



**Explanation:** According to statement (1),  $PQ = PR$ ; therefore,  $\triangle PQR$  is isosceles and  $y = z$ . Since  $x + y + z = 180$ ,  $x + 2y = 180$ . Since statement (1) does not give a value for  $y$ , you cannot answer the question using statement (1) by itself. According to statement (2),  $y = 40$ ; therefore,  $x + z = 140$ . Since statement (2) does not give a value for  $z$ , you cannot answer the question using statement (2) by itself. Using both statements together, you can find  $y$  and  $z$ ; therefore, you can find  $x$ , and the answer to the problem is C.

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.  
B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.  
C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.  
D EACH statement ALONE is sufficient.  
E Statements (1) and (2) TOGETHER are NOT sufficient.

1. Who types at a faster rate, John or Bob?

- (1) The difference between their typing rates is 10 words per minute.  
(2) Bob types at a constant rate of 80 words per minute.

2. What is the average distance that automobile  $D$  travels on one full tank of gasoline?

- (1) Automobile  $D$  averages 8.5 kilometers per liter of gasoline.  
(2) The gasoline tank of automobile  $D$  holds exactly 40 liters of gasoline.

3. If  $l_1$ ,  $l_2$  and  $l_3$  are lines in a plane, is  $l_1$  perpendicular to  $l_3$ ?

- (1)  $l_1$  is perpendicular to  $l_2$ .  
(2)  $l_2$  is perpendicular to  $l_3$ .

4. In a certain packinghouse, grapefruit are packed in bags and the bags are packed in cases. How many grapefruit are in each case that is packed?

- (1) The grapefruit are always packed 5 to a bag and the bags are always packed 8 to a case.  
(2) Each case is always 80 percent full.

5. What is the value of  $x$ ?

- (1)  $x + y = 7$   
(2)  $x - y = 3 - y$

6. A rectangular floor that is 4 meters wide is to be completely covered with nonoverlapping square tiles, each with side of length 0.25 meter, with no portion of any tile remaining. What is the least number of such tiles that will be required?

- (1) The length of the floor is three times the width.  
(2) The area of the floor is 48 square meters.

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**Practices for GMAT Book 1**

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C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.  
D EACH statement ALONE is sufficient.  
E Statements (1) and (2) TOGETHER are NOT sufficient.
7. If a rope is cut into three pieces of unequal length, what is the length of the shortest of these pieces of rope?
- (1) The combined length of the longer two pieces of rope is 12 meters.  
(2) The combined length of the shorter two pieces of rope is 11 meters.
8. A certain company paid bonuses of \$125 to each of its executive employees and \$75 to each of its nonexecutive employees. If 100 of the employees were nonexecutives, how many were executives?
- (1) The company has a total of 120 employees.  
(2) The total amount that the company paid in bonuses to its employees was \$10,000.
9. What fraction of his salary did Mr. Johnson put into savings last week?
- (1) Last week Mr. Johnson put \$17 into savings.  
(2) Last week Mr. Johnson put 5% of his salary into savings
10. For integers  $a$ ,  $b$ , and  $c$ ,  $\frac{a}{b-c} = 1$ . What is the value of  $\frac{b-c}{b}$ ?
- (1)  $\frac{a}{b} = \frac{3}{5}$   
(2)  $a$  and  $b$  have no common factors greater than 1.
11. If the price of a magazine is to be doubled, by what percent will the number of magazines sold decrease?
- (1) The current price of the magazine is \$1.00.  
(2) For every \$0.25 of increase in price, the number of magazines sold will decrease by 10 percent of the number sold at the current price.
12. If  $J$ ,  $K$ ,  $L$ ,  $M$ , and  $N$  are positive integers in ascending order, what is the value of  $L$ ?
- (1) The value of  $K$  is 3.  
(2) The value of  $M$  is 7.

GO ON TO THE NEXT PAGE.

Practices for GMAT Book 1

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- C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- D EACH statement ALONE is sufficient.
- E Statements (1) and (2) TOGETHER are NOT sufficient.

13. If  $a$ ,  $b$ , and  $c$  are integers, is the number  $3(a + b) + c$  divisible by 3?

- (1)  $a + b$  is divisible by 3.
- (2)  $c$  is divisible by 3.

14. Each  $M$ -type memory unit will increase the base memory capacity of a certain computer by 3 megabytes. What is the base memory capacity, in megabytes, of the computer?

- (1) 2  $M$ -type memory units will increase the computer's base memory capacity by 300 percent.
- (2) The memory capacity of the computer after 2  $M$ -type memory units are added to the base memory capacity is 1.6 times the memory capacity of the computer after 1  $M$ -type memory unit is added to the base memory capacity.

15. If  $xyz \neq 0$ , what is the value of  $\frac{x^3y^4z^2}{z^2y^4x^2}$ ?

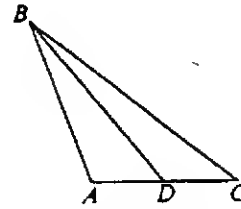
- (1)  $x = 1$
- (2)  $y = 3$

16. What fractional part of the total surface area of cube  $C$  is red?

- (1) Each of 3 faces of  $C$  is exactly  $\frac{1}{2}$  red.
- (2) Each of 3 faces of  $C$  is entirely white.

17. If positive integer  $x$  is divided by 2, the remainder is 1. What is the remainder when  $x$  is divided by 4?

- (1)  $31 < x < 35$
- (2)  $x$  is a multiple of 3.



18. In the figure above,  $D$  is a point on side  $AC$  of  $\triangle ABC$ . Is  $\triangle ABC$  isosceles?

- (1) The area of triangular region  $ABD$  is equal to the area of triangular region  $DBC$ .
- (2)  $BD \perp AC$  and  $AD = DC$

19. If  $x$  is an integer, what is the value of  $x$ ?

- (1)  $-2(x + 5) < -1$
- (2)  $-3x > 9$

GO ON TO THE NEXT PAGE.



## Practices for GMAT Book 1

- A Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.  
 B Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.  
 C BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.  
 D EACH statement ALONE is sufficient.  
 E Statements (1) and (2) TOGETHER are NOT sufficient.

Food	Number of Calories per Kilogram	Number of Grams of Protein per Kilogram
<i>S</i>	2,000	150
<i>T</i>	1,500	90

20. The table above gives the number of calories and grams of protein per kilogram of foods *S* and *T*. If a total of 7 kilograms of *S* and *T* are combined to make a certain food mixture, how many kilograms of food *S* are in the mixture?
- (1) The mixture has a total of 12,000 calories.  
 (2) The mixture has a total of 810 grams of protein.
21. If  $y \neq 0$  and  $y \neq -1$ , which is greater,  
 $\frac{x}{y}$  or  $\frac{x}{y+1}$ ?
- (1)  $x \neq 0$   
 (2)  $x > y$
22. Each person on a committee with 40 members voted for exactly one of 3 candidates, *F*, *G*, or *H*. Did Candidate *F* receive the most votes from the 40 votes cast?
- (1) Candidate *F* received 11 of the votes.  
 (2) Candidate *H* received 14 of the votes.
23. *S* is a set of integers such that
- if *a* is in *S*, then  $-a$  is in *S*, and
  - if each of *a* and *b* is in *S*, then *ab* is in *S*.
- Is  $-4$  in *S*?
- (1) 1 is in *S*.  
 (2) 2 is in *S*.
24. If the area of triangular region *RST* is 25, what is the perimeter of *RST*?
- (1) The length of one side of *RST* is  $5\sqrt{2}$ .  
 (2) *RST* is a right isosceles triangle.
25. If *x* and *y* are consecutive odd integers, what is the sum of *x* and *y*?
- (1) The product of *x* and *y* is negative.  
 (2) One of the integers is equal to  $-1$ .

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
 DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 3

30 Minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this section are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. What is the average (arithmetic mean) of the numbers 15, 16, 17, 17, 18, and 19?  
(A) 14.2 (B) 16.5 (C) 17 (D) 17.5 (E) 18
2. Kathy bought 4 times as many shares in Company X as Carl, and Carl bought 3 times as many shares in the same company as Tom. Which of the following is the ratio of the number of shares bought by Kathy to the number of shares bought by Tom?  
(A)  $\frac{3}{4}$   
(B)  $\frac{4}{3}$   
(C)  $\frac{3}{1}$   
(D)  $\frac{4}{1}$   
(E)  $\frac{12}{1}$
3. Of the following, which is closest to  $\frac{0.15 \times 495}{9.97}$ ?  
(A) 7.5 (B) 15 (C) 75 (D) 150 (E) 750
4. A manager has \$6,000 budgeted for raises for 4 full-time and 2 part-time employees. Each of the full-time employees receives the same raise, which is twice the raise that each of the part-time employees receives. What is the amount of the raise that each full-time employee receives?  
(A) \$750  
(B) \$1,000  
(C) \$1,200  
(D) \$1,500  
(E) \$3,000

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**Practices for GMAT Book 1**

5.  $x^2 - \left(\frac{x}{2}\right)^2 =$

(A)  $x^2 - x$

(B)  $\frac{x^2}{4}$

(C)  $\frac{x^2}{2}$

(D)  $\frac{3x^2}{4}$

(E)  $\frac{3x^2}{2}$

6. A hospital pharmacy charges \$0.40 per fluidram of a certain medicine but allows a discount of 15 percent to Medicare patients. How much should the pharmacy charge a Medicare patient for 3 fluidounces of the medicine? (128 fluidrams = 16 fluidounces)

- (A) \$9.60  
(B) \$8.16  
(C) \$3.20  
(D) \$2.72  
(E) \$1.02

7.  $(-1)^2 - (-1)^3 =$

- (A) -2 (B) -1 (C) 0 (D) 1 (E) 2

8. At a certain bowling alley, it costs \$0.50 to rent bowling shoes for the day and \$1.25 to bowl 1 game. If a person has \$12.80 and must rent shoes, what is the greatest number of complete games that person can bowl in one day?

- (A) 7  
(B) 8  
(C) 9  
(D) 10  
(E) 11

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**Practices for GMAT Book 1**

9. If  $\frac{x}{y} = 2$ , then  $\frac{x-y}{x} =$
- (A)  $-1$   
(B)  $-\frac{1}{2}$   
(C)  $\frac{1}{2}$   
(D)  $1$   
(E)  $2$
10. If each photocopy of a manuscript costs 4 cents per page, what is the cost, in cents, to reproduce  $x$  copies of an  $x$ -page manuscript?
- (A)  $4x$  (B)  $16x$  (C)  $x^2$   
(D)  $4x^2$  (E)  $16x^2$
11. Ken left a job paying \$75,000 per year to accept a sales job paying \$45,000 per year plus 15 percent commission. If each of his sales is for \$750, what is the least number of sales he must make per year if he is not to lose money because of the change?
- (A) 40  
(B) 200  
(C) 266  
(D) 267  
(E) 600

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MONTHLY KILOWATT-HOURS

	500	1,000	1,500	2,000
Present	\$24.00	\$41.00	\$57.00	\$73.00
Proposed	\$26.00	\$45.00	\$62.00	\$79.00

12. The table above shows present rates and proposed rates for electricity for residential customers. For which of the monthly kilowatt-hours shown would the proposed rate be the greatest percent increase over the present rate?
- (A) 500  
(B) 1,000  
(C) 1,500  
(D) 2,000  
(E) Each of the percent increases is the same.
13. If  $a$ ,  $b$ , and  $c$  are three consecutive odd integers such that  $10 < a < b < c < 20$  and if  $b$  and  $c$  are prime numbers, what is the value of  $a + b$ ?
- (A) 24  
(B) 28  
(C) 30  
(D) 32  
(E) 36
14. Of a group of people surveyed in a political poll, 60 percent said that they would vote for candidate  $R$ . Of those who said they would vote for  $R$ , 90 percent actually voted for  $R$ , and of those who did not say that they would vote for  $R$ , 5 percent actually voted for  $R$ . What percent of the group voted for  $R$ ?
- (A) 56%  
(B) 59%  
(C) 62%  
(D) 65%  
(E) 74%
15. If  $r = 1 + \frac{1}{3} + \frac{1}{9} + \frac{1}{27}$  and  $s = 1 + \frac{1}{3}r$ , then  $s$  exceeds  $r$  by
- (A)  $\frac{1}{3}$  (B)  $\frac{1}{6}$  (C)  $\frac{1}{9}$  (D)  $\frac{1}{27}$  (E)  $\frac{1}{81}$

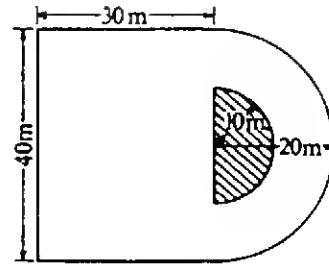
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16. 
$$\frac{0.025 \times \frac{15}{2} \times 48}{5 \times 0.0024 \times \frac{3}{4}} =$$

- (A) 0.1  
(B) 0.2  
(C) 100  
(D) 200  
(E) 1,000

17. A student responded to all of the 22 questions on a test and received a score of 63.5. If the scores were derived by adding 3.5 points for each correct answer and deducting 1 point for each incorrect answer, how many questions did the student answer incorrectly?

- (A) 3 (B) 4 (C) 15 (D) 18 (E) 20



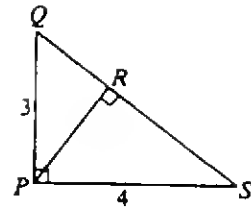
18. The figure above represents a rectangular parking lot that is 30 meters by 40 meters and an attached semicircular driveway that has an outer radius of 20 meters and an inner radius of 10 meters. If the shaded region is not included, what is the area, in square meters, of the lot and driveway?

- (A)  $1,350\pi$   
(B)  $1,200 + 400\pi$   
(C)  $1,200 + 300\pi$   
(D)  $1,200 + 200\pi$   
(E)  $1,200 + 150\pi$

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19. One-fifth of the light switches produced by a certain factory are defective. Four-fifths of the defective switches are rejected and  $\frac{1}{20}$  of the nondefective switches are rejected by mistake. If all the switches not rejected are sold, what percent of the switches sold by the factory are defective?

(A) 4%  
(B) 5%  
(C) 6.25%  
(D) 11%  
(E) 16%



20. In  $\triangle PQS$  above, if  $PQ = 3$  and  $PS = 4$ , then  $PR =$

(A)  $\frac{9}{4}$  (B)  $\frac{12}{5}$  (C)  $\frac{16}{5}$  (D)  $\frac{15}{4}$  (E)  $\frac{20}{3}$

## S T O P

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DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 4

30 Minutes

20 Questions

**Directions:** In this section solve each problem, using any available space on the page for scratchwork. Then indicate the best of the answer choices given.

**Numbers:** All numbers used are real numbers.

**Figures:** Figures that accompany problems in this section are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.

1. If  $x$  is an even integer, which of the following is an odd integer?  
(A)  $3x + 2$   
(B)  $7x$   
(C)  $8x + 5$   
(D)  $x^2$   
(E)  $x^3$
2. On a purchase of \$120, a store offered a payment plan consisting of a \$20 down payment and 12 monthly payments of \$10 each. What percent of the purchase price, to the nearest tenth of a percent, did the customer pay in interest by using this plan?  
(A) 16.7%  
(B) 30%  
(C) 75.8%  
(D) 106.7%  
(E) 107.5%
3.  $\frac{5}{4} \left( 42 \div \frac{3}{16} \right) =$   
(A) 6.3 (B) 9.8 (C) 179.2  
(D) 224 (E) 280
4. When magnified 1,000 times by an electron microscope, the image of a certain circular piece of tissue has a diameter of 0.5 centimeter. The actual diameter of the tissue, in centimeters, is  
(A) 0.005  
(B) 0.002  
(C) 0.001  
(D) 0.0005  
(E) 0.0002

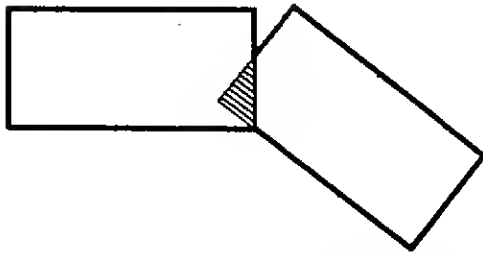
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Practices for GMAT Book 1

5. In 1970 there were 8,902 women stockbrokers in the United States. By 1978 the number had increased to 19,947. Approximately what was the percent increase?

(A) 45%  
(B) 125%  
(C) 145%  
(D) 150%  
(E) 225%



6. In the figure above, two rectangles with the same dimensions overlap to form the shaded region. If each rectangle has perimeter 12 and the shaded region has perimeter 3, what is the total length of the heavy line segments?

(A) 15 (B) 18 (C) 21 (D) 22 (E) 23

7. If one root of the equation  $2x^2 + 3x - k = 0$  is 6, what is the value of  $k$ ?

(A) 90  
(B) 42  
(C) 18  
(D) 10  
(E) -10

8. Bottle  $R$  contains 250 capsules and costs \$6.25. Bottle  $T$  contains 130 capsules and costs \$2.99. What is the difference between the cost per capsule for bottle  $R$  and the cost per capsule for bottle  $T$ ?

(A) \$0.25  
(B) \$0.12  
(C) \$0.05  
(D) \$0.03  
(E) \$0.002

GO ON TO THE NEXT PAGE.

9. Trucking transportation rates are  $x$  dollars per metric ton per kilometer. How much does it cost, in dollars, to transport one dozen cars, which weigh two metric tons each,  $n$  kilometers by truck?
- (A)  $\frac{x}{12n}$  (B)  $\frac{x}{24n}$  (C)  $\frac{xn}{24}$   
(D)  $12xn$  (E)  $24xn$
10. For a positive integer  $n$ , the number  $n!$  is defined to be  $n(n-1)(n-2)\dots(1)$ . For example,  $4! = 4(3)(2)(1)$ . What is the value of  $5! - 3!$ ?
- (A) 120  
(B) 114  
(C) 20  
(D) 15  
(E) 2
11. A man who died left an estate valued at \$111,000. His will stipulated that his estate was to be distributed so that each of his three children received from the estate and his previous gifts, combined, the same total amount. If he had previously given his oldest child \$15,000, his middle child \$10,000, and his youngest \$2,000, how much did the youngest child receive from the estate?
- (A) \$50,000  
(B) \$48,000  
(C) \$46,000  
(D) \$44,000  
(E) \$39,000

GO ON TO THE NEXT PAGE.

12. If  $y > 0$ , which of the following is equal to  $\sqrt{48y^3}$ ?
- (A)  $4y\sqrt{3y}$   
 (B)  $3y\sqrt{4y}$   
 (C)  $2\sqrt{12y}$   
 (D)  $3\sqrt{8y}$   
 (E)  $16y\sqrt{3y}$
13. The volume of a box with a square base is 54 cubic centimeters. If the height of the box is twice the width of the base, what is the height, in centimeters?
- (A) 2  
 (B) 3  
 (C) 4  
 (D) 6  
 (E) 9
15. The sum of the interior angles of any polygon with  $n$  sides is  $180(n - 2)$  degrees. If the sum of the interior angles of polygon  $P$  is three times the sum of the interior angles of quadrilateral  $Q$ , how many sides does  $P$  have?
- (A) 6 (B) 8 (C) 10 (D) 12 (E) 14
16. In Company  $X$ , 30 percent of the employees live over ten miles from work and 60 percent of the employees who live over ten miles from work are in car pools. If 40 percent of the employees of Company  $X$  are in car pools, what percent of the employees of Company  $X$  live ten miles or less from work and are in car pools?
- (A) 12%  
 (B) 20%  
 (C) 22%  
 (D) 28%  
 (E) 32%

$$\begin{aligned} q &= 3\sqrt{3} \\ r &= 1 + 2\sqrt{3} \\ s &= 3 + \sqrt{3} \end{aligned}$$

14. If  $q$ ,  $r$ , and  $s$  are the numbers shown above, which of the following shows their order from greatest to least?
- (A)  $q, r, s$  (B)  $q, s, r$  (C)  $r, q, s$   
 (D)  $s, q, r$  (E)  $s, r, q$

GO ON TO THE NEXT PAGE.

**Practices for GMAT Book 1**

17. If an organization were to sell  $n$  tickets for a theater production, the total revenue from ticket sales would be 20 percent greater than the total costs of the production. If the organization actually sold all but 5 percent of the  $n$  tickets, the total revenue from ticket sales was what percent greater than the total costs of the production?
- (A) 4%  
(B) 10%  
(C) 14%  
(D) 15%  
(E) 18%
18. When the integer  $n$  is divided by 6, the remainder is 3. Which of the following is NOT a multiple of 6?
- (A)  $n - 3$  (B)  $n + 3$  (C)  $2n$   
(D)  $3n$  (E)  $4n$
19. How many liters of pure alcohol must be added to a 100-liter solution that is 20 percent alcohol in order to produce a solution that is 25 percent alcohol?
- (A)  $\frac{7}{2}$   
(B) 5  
(C)  $\frac{20}{3}$   
(D) 8  
(E)  $\frac{39}{4}$
20. If 10 persons meet at a reunion and each person shakes hands exactly once with each of the others, what is the total number of handshakes?
- (A)  $10 \cdot 9 \cdot 8 \cdot 7 \cdot 6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1$   
(B)  $10 \cdot 10$   
(C)  $10 \cdot 9$   
(D) 45  
(E) 36

**S T O P**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## Practices for GMAT Book 1

### SECTION 5

Time —25 minutes

16 Questions

**Directions:** For each question in this section, select the best of the answer choices given.

1. One problem with labor unions today is that their top staffs consist of college-trained lawyers, economists, and labor relations experts who cannot understand the concerns of real workers. One goal of union reform movements should be to build staffs out of workers who have come up from the ranks of the industry involved.

The argument above depends primarily on which of the following assumptions?

- (A) Higher education lessens people's identification with their class background.
- (B) Union staffs should include more people with first-hand industrial supervisory experience.
- (C) People who have worked in a given industry can understand the concerns of workers in that industry.
- (D) Most labor unions today do not fairly represent workers' interests.
- (E) A goal of union reform movements should be to make unions more democratic.

2. Opening a plant in war-torn Country X is not inadvisable, despite what critics of the plan may say. Ten years ago we opened our plant in Country Y in the middle of a revolution; that plant has been generating substantial profits ever since.

Which of the following is the author of the argument above most reasonably intending the reader to conclude?

- (A) Wars are profitable for the author's particular business.
- (B) Country X is a more politically stable nation than is Country Y.
- (C) Critics of the proposed plant in Country X are likely to be biased.
- (D) The proposed plant in Country X will generate profits despite the war.
- (E) The proposed plant in Country X will be more successful than the plant in Country Y.

3. Since the deregulation of the air travel industry in the late 1970's, air fares have been relatively low and the number of passenger-miles flown has been increasing. In recent months, however, air fares have risen but the number of passenger-miles flown is still going up.

Which of the following can most reasonably be inferred from the statements above?

- (A) The cost of air travel does not affect the number of passenger-miles flown.
- (B) People are now flying to destinations that they formerly reached by train or by other modes of transportation.
- (C) Factors other than low air fares must be contributing to the rise in the number of passenger-miles flown.
- (D) Takeovers in the deregulated air travel industry have been responsible for the rise in air fares.
- (E) Air fares can climb even higher without causing a drop in the number of passenger-miles flown.

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4. One Zydol capsule contains twice the pain reliever found in regular aspirin. A consumer will have to take two aspirin in order to get the relief provided by one Zydol. And since a bottle of Zydol costs the same as a bottle of regular aspirin, consumers can be expected to switch to Zydol.

Which of the following, if true, would most weaken the argument that consumers will be discontinuing the use of regular aspirin and switching to Zydol?

- (A) A regular bottle of aspirin contains more than twice as many capsules as does a bottle of Zydol.
- (B) The pain reliever in Zydol is essentially the same pain reliever found in regular aspirin.
- (C) Some headache sufferers experience a brief period of dizziness shortly after taking Zydol but not after taking regular aspirin.
- (D) Neither regular aspirin nor Zydol is as effective in the relief of serious pain as are drugs available only by prescription.
- (E) A Zydol capsule is twice as large as the average aspirin.

5. At a certain college, graduate teaching assistants conduct discussion sections but have no input into grading. It has been suggested that graduate assistants be given some grading responsibility, but many undergraduates oppose that proposal. They argue that if grades are assigned by graduate assistants, regular full-time faculty will devote less time and attention to undergraduate work.

The information in the passage above answers which one of the following questions?

- (A) Are grades assigned by graduate teaching assistants inherently as fair as those given by regular faculty?
- (B) Are some undergraduates in favor of maintaining the full-time faculty's interest in their schoolwork?
- (C) May regular full-time faculty conduct discussion sections at the college?
- (D) Does graduate student contact with undergraduates' work make the grades assigned by regular faculty less valid?
- (E) Are regular faculty members in favor of giving graduate assistants some teaching responsibility?

6. Air travel is becoming increasingly more dangerous. In the last year there have been seven major collisions resulting in over 700 deaths, more deaths than in any previous year.

Which statement, if true, would most weaken the argument above?

- (A) Since the volume of air traffic has been increasing all the time, an increase in the number of deaths due to collisions does not necessarily mean greater danger.
- (B) The increase in collisions can be explained by statistical coincidence, hijackings, and unusual weather.
- (C) Mortality per passenger mile is lower for air travel than for any kind of surface transportation.
- (D) The increase in deaths due to collision in air travel has proceeded at a rate identical to that for deaths in all other major forms of transportation.
- (E) Last year the average number of passengers per flown plane was significantly lower than that of previous years.

7. According to a recent study, attending a single-sex high school aids an adolescent's physical growth. Cited as evidence is the finding that during the first two years of high school, the average boy in an all-boys school grew five inches, and the average girl in an all-girls school grew four inches.

The answer to which of the following questions is needed in order to evaluate the reasoning presented in the study?

- (A) Why was it that the first two years of high school were chosen as the focus of the study?
- (B) Did some of the boys in the study grow less than five inches while they were in high school?
- (C) How much do the average male student and the average female student in a co-educational school grow during their first two years of high school?
- (D) Did the girls in the study have as nutritious a diet as the boys during the time the study was being conducted?
- (E) What was the average height of the boys and the average height of the girls upon entering high school?

GO ON TO THE NEXT PAGE.

8. Although most people know that exercise is good for the body, few realize the extent to which it is valuable to the mind. The blood circulates more rapidly after physical exertion, thus allowing all of the body's organs to operate more efficiently. This increased activity enables the brain to receive more oxygen, thereby creating a higher capacity for concentration.

The main point in the argument above is that

- (A) the greater the amount of oxygen the brain receives, the better the brain functions.
  - (B) exercise is a mental, as well as physical, activity.
  - (C) exercise helps the brain more than it does the rest of the body.
  - (D) people can greatly improve their powers of concentration by exercising more often.
  - (E) exercise serves more than one purpose.
9. Ernesto: Sales of VCR's—videocassette recorders—will decline in the next few years because the saturation level among U.S. households has virtually been reached.

Milton: Every year a greater number of popular feature films is released on cassette—at least 6 per month. Clearly VCR sales will remain constant, if not rise.

Which of the following is the best logical evaluation of Milton's response to Ernesto's argument?

- (A) He cites evidence that, if true, disproves the evidence cited by Ernesto in drawing his conclusion.
- (B) He points out a gap in the logic followed by Ernesto in drawing his conclusion.
- (C) He cites an issue ignored by Ernesto and which outweighs the issues raised by Ernesto.
- (D) He does not speak to Ernesto's point because he fails to raise the issue of whether VCR sales may be linked to sales of other leisure-related products.
- (E) He fails to respond to Ernesto's argument because he assumes that nothing will significantly retard the sale of VCR's, which was the issue that Ernesto raised.

10. Archaeologists have discovered various paintings on the walls and ceiling of a Chinese cave whose entrance was blocked by a volcanic eruption in the 25th century B.C. and only recently cleared by an earthquake. Since the paintings depict warriors using Type C bronze weapons, these archaeologists have concluded that Type C bronze weapons were already widely used in this area by 2500 B.C., far earlier than was previously believed.

Which of the following pieces of additional evidence would most seriously weaken the archaeologists' conclusion?

- (A) Another entrance to the cave remained clear until a second volcanic eruption 1,000 years after the first.
- (B) Archaeologists have evidence that Type C bronze weapons were in wide use in areas of present-day India as early as 2500 B.C.
- (C) Alternative methods of dating place the time of the volcanic eruption somewhat earlier, at around 3000 B.C.
- (D) Most experts believe that Type C bronze weapons were not in use anywhere in present-day China until 2000 B.C.
- (E) The paintings were very faded when the archaeologists found them, making identification of the depicted weapons difficult.

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11. Considering the current economy, the introduction of a new brand of cereal is unlikely to expand total sales of cereal, but rather will just cause some existing buyers of cereal to switch brands. So it makes no sense for the Coolidge Corporation to introduce another brand of cereal, since they will only hurt sales of the brands of cereal they already produce.

Which of the following, if true, would most seriously weaken the argument above?

- (A) Total sales of cereal will increase as the total population increases.
- (B) Many new brands of cereal sell extremely well for the first year of their existence.
- (C) Coolidge Corporation currently produces fewer brands of cereal than do its competitors.
- (D) Some cereal buyers regularly switch from brand to brand, even when no new brands have been introduced.
- (E) Research indicates that the new brand will attract more buyers of competitors' cereals than buyers of other Coolidge brands.

12. A public health official reported that 60 percent of the children at summer school have never had the measles or chicken pox, and that of this 60 percent not one child has ever been observed to eat the cheese served in the school lunches. From this he concluded that children who abstain from cheese products will protect themselves from most childhood disease.

Each of the following, if true, would strengthen the official's argument EXCEPT:

- (A) Medically speaking, whatever serves to inhibit measles and chicken pox will generally inhibit the entire spectrum of childhood diseases.
- (B) The observations the official carried out were extremely accurate, and all those observed to abstain from cheese at school did, in fact, abstain.
- (C) The children's eating habits are the same at school as anywhere else, and those who abstain from cheese products at school do so in general.
- (D) Recent research has pointed to a deficiency in cheese products as one of the major causes of measles and chicken pox infections.
- (E) Most cheeses and cheese products harbor bacteria that are known to be causative agents for many childhood diseases, such as measles and chicken pox.

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13. A confidential survey revealed that 75 percent of the employees of Company P are dissatisfied with their jobs. However, an investigation into working conditions at the company showed nothing uncommonly bad. Therefore, Company P's consulting firm concluded that the employees' dissatisfaction must result from an unusually high incidence of psychological problems on their part.

Each of the following, if true, casts doubt on the consulting firm's conclusion EXCEPT:

- (A) In the investigation of working conditions, no account was taken of the fact that for the past year many Company P employees worked on a joint venture with Company O, at Company O's facilities.
- (B) Workers in many companies are dissatisfied although there are no apparent problems with their working conditions.
- (C) The consulting firm's conception of what constitutes uncommonly bad working conditions is not identical to that of Company P's employees.
- (D) The reasons given by Company P's employees for their dissatisfaction varied greatly from employee to employee.
- (E) A battery of tests performed on Company P's employees one month ago revealed no significant psychological stresses or problems.

14. Director: Our engineers are considering two different sites—one on the Abaco River and one on the Bornos River—for a hydroelectric plant. Although we have the technical expertise to build roughly the same plant in either place, producing roughly the same amount of electricity per hour, building the plant on the Abaco site will cost over twice as much money. With our budget currently in deficit, we should build the dam at the Bornos site.

Which of the following, if true, best explains the difference in building costs for the two proposed dam sites?

- (A) Many farms along the lower Bornos River valley would benefit from the controlled flow of water a dam would make possible.
- (B) The Abaco site is in an inaccessible area, requiring the building of new roads and the importation of laborers.
- (C) The Bornos site is near a large city whose residents could use the resulting lake for inexpensive recreation.
- (D) The Abaco site is in an area that contains many endangered species that would be threatened by the new dam.
- (E) The Abaco River has a relatively low volume of flow, making it impossible to expand an Abaco plant to meet future electricity needs.

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15. In 1988, 50 people with emotional disturbances underwent hypnosis to be cured of their mood swings. A follow-up survey in 1993 revealed that five had fairly stable emotional conditions at the time of the survey. These five subjects can therefore serve as models of the types of people for whom hypnosis is likely to be successful.

Which of the following, if true, casts the most doubt on the suitability of those five subjects as models in the sense described?

- (A) The five subjects have very different personalities and backgrounds.
- (B) Since 1988, the five subjects have experienced dramatic mood swings interspersed with periods of relative stability.
- (C) Those people who were still suffering from unstable emotional conditions at the time of the 1993 survey had shown no improvement since 1988.
- (D) Many psychologists are less concerned about a patient's mood swings than about the patient's willingness to express his or her problems and fears.
- (E) The emotional condition of most of the 45 subjects who were still unstable at the time of the 1993 survey had actually worsened since 1988.

16. The cause of the peculiar columnar growth pattern displayed by junipers growing near burning underground veins of lignite coal has never been convincingly explained. Until recently, the accepted theory posited that the abundance of carbon monoxide in the local atmosphere caused the columnar growth. However, a new theory holds that the cause is the persistent heat present near these underground fires which, while not intense enough to inflame the trees, can nonetheless change their normal growth pattern.

The existence of which of the following would provide the strongest support for the new theory?

- (A) A columnar juniper growing in an atmosphere of intense heat and an absence of carbon monoxide
- (B) A normal juniper growing in an atmosphere of intense heat and an absence of carbon monoxide
- (C) A columnar juniper growing in an atmosphere of normal heat and a high concentration of carbon monoxide
- (D) A normal juniper growing in an atmosphere of intense heat and a high concentration of carbon monoxide
- (E) A columnar juniper growing in an atmosphere of intense heat and a high concentration of carbon monoxide

**STOP**

END OF TEST.

## Practices for GMAT Book 1

### SECTION 6

30 Minutes

25 Questions

**Directions:** In each of the following sentences, some part of the sentence or the entire sentence is underlined. Beneath each sentence you will find five ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is better than any of the alternatives, choose answer A; otherwise choose one of the others. Select the best version and fill in the corresponding oval on your answer sheet.

This is a test of correctness and effectiveness of expression. In choosing answers, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, and sentence construction. Choose the answer that expresses most effectively what is presented in the original sentence; this answer should be clear and exact, without awkwardness, ambiguity, or redundancy.

1. A fire in an enclosed space burns with the aid of reflected radiation that preheats the fuel, making ignition much easier and flames spreading more quickly.  
(A) flames spreading  
(B) flame spreads  
(C) flames are caused to spread  
(D) causing flames to spread  
(E) causing spreading of the flames
2. Roy Wilkins was among the last of a generation of civil rights activists who led the nation through decades of change so profound many young Americans are not able to imagine, even less to remember, what segregation was like.  
(A) so profound many young Americans are not able to imagine, even less to remember  
(B) so profound that many young Americans cannot imagine, much less remember  
(C) so profound many young Americans cannot imagine nor even less remember  
(D) of such profundity many young Americans cannot imagine, even less can they remember  
(E) of such profundity that many young Americans are not able to imagine, much less to remember
3. The residents' opposition to the spraying program has rekindled an old debate among those who oppose the use of pesticides and those who feel that the pesticides are necessary to save the trees.  
(A) among those who oppose the use of pesticides and  
(B) between those who oppose the use of pesticides and  
(C) among those opposing the use of pesticides with  
(D) between those who oppose the use of pesticides with  
(E) among those opposing the use of pesticides and
4. In cold-water habitats, certain invertebrates and fish convert starches into complex carbohydrates called glycerols, in effect manufacturing its own antifreeze.  
(A) in effect manufacturing its own antifreeze  
(B) effectively manufacturing antifreeze of its own  
(C) in effect manufacturing their own antifreeze  
(D) so that they manufacture their own antifreeze  
(E) thus the manufacture of its own antifreeze
5. Slips of the tongue do not necessarily reveal concealed beliefs or intentions but rather are the result from the competition between various processing mechanisms in the brain.  
(A) but rather are the result from  
(B) and instead are the result from  
(C) being rather the result of  
(D) and rather result from  
(E) but rather result from
6. The new contract forbids a strike by the transportation union.  
(A) forbids a strike by the transportation union  
(B) forbids the transportation union from striking  
(C) forbids that there be a strike by the transportation union  
(D) will forbid the transportation union from striking  
(E) will forbid that the transportation union strikes

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7. Monitoring heart patients' exercise, as well as athletes exercising, is now done by small transmitters broadcasting physiological measurements to nearby recording machines.
- (A) Monitoring heart patients' exercise, as well as athletes exercising, is now done by small transmitters broadcasting physiological measurements to nearby recording machines.
  - (B) Monitoring the exercise of heart patients, as well as athletes exercising, is now done by small transmitters broadcasting physiological measurements to nearby recording machines.
  - (C) Small transmitters broadcasting physiological measurements to nearby recording machines are now used to monitor the exercise of both heart patients and athletes.
  - (D) Broadcasting physiological measurements to nearby recording machines, small transmitters are now used to monitor heart patients' exercise, as well as athletes exercising.
  - (E) Both athletes exercising and heart patients' exercise are now monitored by small transmitters broadcasting physiological measurements to nearby recording machines.
8. The commission has directed advertisers to restrict the use of the word "natural" to foods that do not contain color or flavor additives, chemical preservatives, or nothing that has been synthesized.
- (A) or nothing that has been
  - (B) nor anything that was
  - (C) and nothing that is
  - (D) or anything that has been
  - (E) and anything
9. Bringing the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War was a special governmentally sanctioned price increase during a period of wage and price controls.
- (A) Bringing the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War was a special governmentally sanctioned price increase during a period of wage and price controls.
  - (B) What brought the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War was a special price increase that the government sanctioned during a period of wage and price controls.
  - (C) That which brought the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War was a special governmentally sanctioned price increase during a period of wage and price controls.
  - (D) What has brought the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War was a special price increase that the government sanctioned during a period of wages and price controls.
  - (E) To bring the Ford Motor Company back from the verge of bankruptcy shortly after the Second World War, there was a special price increase during a period of wages and price controls that government sanctioned.
10. Like Haydn, Schubert wrote a great deal for the stage, but he is remembered principally for his chamber and concert-hall music.
- (A) Like Haydn, Schubert
  - (B) Like Haydn, Schubert also
  - (C) As has Haydn, Schubert
  - (D) As did Haydn, Schubert also
  - (E) As Haydn did, Schubert also

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11. Charlotte Perkins Gilman, a late nineteenth-century feminist, called for urban apartment houses including child-care facilities and clustered suburban houses including communal eating and social facilities.
- (A) including child-care facilities and clustered suburban houses including communal eating and social facilities
  - (B) that included child-care facilities, and for clustered suburban houses to include communal eating and social facilities
  - (C) with child-care facilities included and for clustered suburban houses to include communal eating and social facilities
  - (D) that included child-care facilities and for clustered suburban houses with communal eating and social facilities
  - (E) to include child-care facilities and for clustered suburban houses with communal eating and social facilities included
12. The odds are about 4 to 1 against surviving a takeover offer, and many business consultants therefore advise that a company's first line of defense in eluding offers like these be to even refuse to take calls from likely corporate raiders.
- (A) that a company's first line of defense in eluding offers like these be to even refuse
  - (B) that a company's first line of defense in eluding such offers be to refuse even
  - (C) a company defending itself against offers of this kind that, as a first line of defense, they should even refuse
  - (D) companies which are defending themselves against such an offer that, as a first line of defense, they should even refuse
  - (E) that the first line of defense for a company who is eluding offers like these is the refusal even
13. Japan received huge sums of capital from the United States after the Second World War, using it to help build a modern industrial system.
- (A) Japan received huge sums of capital from the United States after the Second World War, using it to help build
  - (B) Japan received huge sums of capital from the United States after the Second World War and used it to help in building
  - (C) Japan used the huge sums of capital it received from the United States after the Second World War to help build
  - (D) Japan's huge sums of capital received from the United States after the Second World War were used to help it in building
  - (E) Receiving huge sums of capital from the United States after the Second World War, Japan used it to help build
14. Although one link in the chain was demonstrated to be weak, but not sufficiently so to require the recall of the automobile.
- (A) demonstrated to be weak, but not sufficiently so to require
  - (B) demonstrated as weak, but it was not sufficiently so that it required
  - (C) demonstrably weak, but not sufficiently so to require
  - (D) demonstrably weak, it was not so weak as to require
  - (E) demonstrably weak, it was not weak enough that it required
15. Although the Supreme Court ruled as long ago as 1880 that Blacks could not be excluded outright from jury service, nearly a century of case-by-case adjudication has been necessary to develop and enforce the principle that all juries must be drawn from "a fair cross section of the community."
- (A) has been necessary to develop and enforce the principle that all juries must be
  - (B) was necessary for developing and enforcing the principle of all juries being
  - (C) was to be necessary in developing and enforcing the principle of all juries to be
  - (D) is necessary to develop and enforce the principle that all juries must be
  - (E) will be necessary for developing and enforcing the principle of all juries being
16. The modernization program for the steel mill will cost approximately 51 million dollars, which it is hoped can be completed in the late 1980's.
- (A) The modernization program for the steel mill will cost approximately 51 million dollars, which it is hoped can be completed in the late 1980's.
  - (B) The modernization program for the steel mill, hopefully completed in the late 1980's, will cost approximately 51 million dollars.
  - (C) Modernizing the steel mill, hopefully to be completed in the late 1980's, will cost approximately 51 million dollars.
  - (D) The program for modernizing the steel mill, which can, it is hoped, be completed in the late 1980's and cost approximately 51 million dollars.
  - (E) Modernizing the steel mill, a program that can, it is hoped, be completed in the late 1980's, will cost approximately 51 million dollars.

GO ON TO THE NEXT PAGE.

## Practices for GMAT Book 1

17. Camus broke with Sartre in a bitter dispute over the nature of Stalinism.
- (A) in a bitter dispute over
  - (B) over bitterly disputing
  - (C) after there was a bitter dispute over
  - (D) after having bitterly disputed about
  - (E) over a bitter dispute about
18. Nowhere in Prakta is the influence of modern European architecture more apparent than their government buildings.
- (A) more apparent than their
  - (B) so apparent as their
  - (C) more apparent than in its
  - (D) so apparent than in their
  - (E) as apparent as it is in its
19. Federal legislation establishing a fund for the cleanup of sites damaged by toxic chemicals permits compensating state governments for damage to their natural resources but does not allow claims for injury to people.
- (A) compensating state governments for damage to
  - (B) compensating state governments for the damaging of
  - (C) giving state governments compensation for damaging
  - (D) giving compensation to state governments for the damage of
  - (E) the giving of compensation to state governments for damaging
20. The lawyer for the defense charged that she suspected the police of having illegally taped her confidential conversations with her client and then used the information obtained to find evidence supporting their murder charges.
- (A) used the information obtained to find evidence supporting
  - (B) used such information as they obtained to find evidence supporting
  - (C) used the information they had obtained to find evidence that would support
  - (D) of using the information they had obtained to find evidence that would support
  - (E) of using such information as they obtained to find evidence that would be supportive of
21. According to surveys by the National Institute on Drug Abuse, about 20 percent of young adults used cocaine in 1979, doubling those reported in the 1977 survey.
- (A) doubling those reported in the 1977 survey
  - (B) to double the number the 1977 survey reported
  - (C) twice those the 1977 survey reported
  - (D) twice as much as those reported in the 1977 survey
  - (E) twice the number reported in the 1977 survey

GO ON TO THE NEXT PAGE.

22. Inflation has made many Americans reevaluate their assumptions about the future; they still expect to live better than their parents have, but not so well as they once thought they could.
- (A) they still expect to live better than their parents have
  - (B) they still expect to live better than their parents did
  - (C) they still expect to live better than their parents had
  - (D) still expecting to live better than their parents had
  - (E) still expecting to live better than did their parents
23. Europeans have long known that eating quail sometimes makes the eater ill, but only recently has it been established that the illness is caused by a toxin present in the quail's body only under certain conditions.
- (A) Europeans have long known that eating quail sometimes makes
  - (B) Europeans have long known quail eating is sometimes able to make
  - (C) Eating quail has long been known to Europeans to sometimes make
  - (D) It has long been known to Europeans that quail eating will sometimes make
  - (E) It has long been known to Europeans that quail, when it is eaten, has sometimes made
24. The caterpillar of the geometrid moth strikes when special tactile hairs on its body are disturbed, after capturing its prey, holds the victim so that it cannot escape.
- (A) strikes when special tactile hairs on its body are disturbed,
  - (B) striking when special tactile hairs on its body are disturbed, but
  - (C) which strikes when special tactile hairs on its body are disturbed,
  - (D) which, striking when special tactile hairs on its body are disturbed,
  - (E) strikes when special tactile hairs on its body are disturbed and,
25. In assessing the problems faced by rural migrant workers, the question of whether they are better off materially than the urban working poor is irrelevant.
- (A) In assessing the problems faced by rural migrant workers, the question of whether they are better off materially than the urban working poor is irrelevant.
  - (B) The question of whether the rural migrant worker is better off materially than the urban working poor is irrelevant in assessing the problems that they face.
  - (C) A question that is irrelevant in assessing the problems that rural migrant workers face is whether they are better off materially than the urban working poor.
  - (D) In an assessment of the problems faced by rural migrant workers, the question of whether they are better off materially than the urban working poor is irrelevant.
  - (E) The question of whether the rural migrant worker is better off materially than the urban working poor is irrelevant in an assessment of the problems that they face.

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



# GMAT BOOK 1 - ANSWER SHEET

□ □ □ □ : 1999.7.20

	TEST 1						TEST 2						TEST 3						TEST 4						TEST 5						TEST 6					
	1	2	3	4	5	7	1	2	3	4	6	7	1	2	4	5	6	7	1	3	4	5	6	7	1	2	3	4	5	6	1	2	3	4	5	6
1	C	C	A	E	B	C	E	D	C	B	E	B	E	E	A	C	C	E	B	B	C	C	C	C	D	E	A	C	D	C	B	E	C	C	C	D
2	D	A	E	D	A	B	B	C	B	C	D	E	B	E	C	B	E	D	E	D	E	D	B	D	C	C	C	A	B	B	C	C	E	A	D	B
3	E	E	C	E	D	D	B	D	A	A	B	B	C	D	B	C	E	E	D	E	A	C	D	B	C	C	D	D	E	D	A	C	A	E	C	B
4	A	D	D	B	C	A	C	E	A	D	D	C	D	E	E	D	D	A	E	D	C	B	E	A	A	E	B	A	D	D	E	A	C	D	A	C
5	C	C	B	A	C	E	E	D	C	D	A	A	B	D	B	E	B	A	B	B	D	E	D	E	E	D	E	C	A	A	C	B	D	B	B	E
6	A	C	C	C	D	A	A	B	B	B	C	E	E	C	E	C	D	B	D	C	D	E	B	D	B	B	C	B	C	B	D	D	B	C	A	A
7	A	C	E	D	A	C	D	D	D	E	A	D	C	C	D	C	A	B	A	E	A	B	C	E	B	C	D	E	E	B	C	E	E	A	C	C
8	D	E	B	C	C	D	B	B	C	C	B	C	A	B	B	E	B	E	C	A	B	D	B	B	E	A	B	D	E	D	D	D	C	E	E	D
9	E	A	D	B	A	E	B	B	C	D	C	C	D	A	B	A	C	A	C	D	E	A	B	C	A	A	D	A	D	E	E	B	C	E	E	B
10	B	C	A	B	B	B	A	C	B	A	C	E	C	A	B	C	A	X	D	B	A	C	E	B	A	D	A	B	D	A	E	A	D	B	A	A
11	C	D	A	C	A	E	B	B	D	A	D	A	C	D	C	A	A	E	A	C	C	D	A	A	E	C	E	E	C	D	E	C	D	D	E	D
12	C	D	B	C	B	A	E	D	E	E	E	D	A	B	A	E	E	C	E	B	C	C	B	E	D	E	C	E	E	C	C	E	B	A	D	B
13	B	B	E	D	A	B	D	D	B	A	B	E	A	E	B	D	C	D	C	E	E	D	E	A	E	C	B	B	A	E	B	B	D	D	D	C
14	E	B	C	E	B	D	E	B	E	E	A	B	D	C	A	D	C	C	B	D	A	D	C	D	D	B	E	C	C	C	A	D	A	B	B	D
15	D	B	E	D	D	C	A	A	C	E	D	E	E	D	D	A	D	A	B	C	C	B	D	C	A	B	A	B	A	E	D	A	E	B	B	A
16	C	C	E	C	C	E	D	E	C	D	B	D	E	B	E	A	D	C	E	A	B	E	A	D	D	A	D	D	B	C	B	C	E	C	A	E
17	A	E	A	A	E	B	C	D	A	B	A	E	B	C	A	E	A	A	A	C	D	A	C	A	E	A	A	D	D	E	C	A	A	C		A
18	D	B	B	B	E	B	D	A	D	E	C	A	E	A	E	C	E	A	A	D	A	E	C	C	E	B	C	C	C	A	D	B	E	D		C
19	A	D	C	E	A	D	E	A	C	D	D	B	B	E	A	B	B	E	D	C	A	A	E	A	C	D	B	B	C	D	B	C	B	C		A
20	D	C	D	D	E	D	C	C	C	A	E	E	E	E	D	D	D	B	E	E	X	D	A	E	C	C	B	D	A	B	E	D	B	D		D
21	E	C			A				A		A	D	C			E	C		E			E		E	B	A				C	E	E			E	
22	D	A			B				B		C	C	C			D	E		D			E		B	A	B				C	B	A			B	
23	B	D			A				B		B	D	E			B	D		A			B		D	A	B				C	A	B			A	
24	B	B			D				D		D	D	E			E	B		C			E		D	C	A				D	D	B			E	
25	A	C			E				E		E	B	C			A	D		B			B		B	D	D				B	B	A			D	
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